



II. MORBIDITY

**A. INFECTIOUS DISEASES****Background**

Vaccines are among the most effective and reliable of medicines for people of all ages. Every year, they prevent countless serious illnesses and thousands of possible deaths. About 100 million vaccine doses are given annually in the United States, most of them to infants and children as part of their routine immunization schedule. A single dose of some vaccines gives nearly complete protection. With others, a series of doses spread over months or years is needed for the best results.

Children in particular are beneficiaries of the protection from illness that vaccines offer. Currently, there are ten diseases from which children are routinely protected through the use of standard childhood immunizations. These diseases are: diphtheria, tetanus, pertussis (whooping cough), polio, measles, mumps, rubella (German measles), hepatitis B, *Haemophilus influenzae* B (bacterial meningitis), and varicella (chicken pox). Enormous reductions have been seen in each of these serious diseases since the introduction of vaccines. For example, there were 894,134 cases of measles reported in the U.S. in 1941, but only 138 in 1997. Louisiana had no reported cases of measles in 1997.

Although the public is most familiar with the vaccines used for childhood immunization, there are many others that afford protection to individuals at risk of infection from other types of exposures. An example is the hepatitis A vaccine, which recently has become available to selected populations, such as travelers to areas where the disease is endemic.

In addition to being reliable and effective, vaccines are also one of the most cost-effective medical procedures available. The ten vaccine-preventable diseases addressed in standard childhood immunizations are very serious illnesses and very expensive to treat. Vaccines are relatively inexpensive and very effective. Cost estimates show that each dollar spent on immunization saves \$10-\$12 in direct medical and hospitalization costs. These estimates do not include attendant costs, such as workdays lost by family members, costs for outbreak control, or the burden of lives lost to these severe diseases. A prime example is measles, which leads to the hospitalization of approximately 10% of those who become ill. Even with excellent medical care, approximately 1 out of every 1000 cases dies, usually from measles infection of the lungs and of the brain.

The diseases that are prevented by routine childhood immunizations have not disappeared. Pertussis is spread by direct contact, such as coughing, to others who are not immune. As a result of childhood immunization, Louisiana reported only 22 cases of pertussis in 1997. In countries where childhood immunization against pertussis has been halted, there have been large outbreaks of whooping cough. Diphtheria, another dangerous infection, which has been controlled through childhood immunization, has not been seen in Louisiana since 1972. However, there currently is an epidemic of diphtheria in Eastern Europe and Asia. Without immunization, re-introduction of this disease into Louisiana via an infected person from one of these regions is easily possible.



1997 Status

Hepatitis A (HAV) is a viral disease that affects the liver. The number of hepatitis A cases reported in 1997 increased slightly (by 3.3%) from 1996 and 38% from 1995, but Louisiana's case rate consistently has remained lower than the national rate (6.2 vs. 11.7 per 100,000). Sex-race specific rates per 100,000 were highest among African-American males (6.6) followed by African-American females (5.9). Rates by age groups were highest among the 20-44 years age group, which accounted for 50% of the cases reported. This trend is almost identical to that of last year.

Region 8 (the Monroe area) continues to be an endemic area for hepatitis A. It is now joined by Region 7 (the Shreveport area), which includes parishes with the highest numbers of cases reported.

Approximately 58% of the 266 cases statewide reported risk factor information. Of these case reports, 12% attended day care, 16% were contacts of an attendee in a day care, 32% were contacts of a known hepatitis A case, 10% of hepatitis A cases were foodhandlers, and 5% acquired hepatitis A from international travel. Five parishes reported case rates exceeding the state case rate per 100,000: Red River (178), Ouachita (46), Evangeline (18), and Bossier and Caddo (15) each.

Hepatitis B (HBV) is a serious public health problem that affects people of all ages in the United States and around the world. Each year an estimated 300,000 people become infected with the hepatitis B virus in the United States. The disease is caused by a virus that attacks the liver. A person can get hepatitis by direct contact with the blood or body fluids of an infected person. A baby can get hepatitis B from an infected mother during childbirth. Symptoms of hepatitis B include yellowing of the skin or eyes, loss of appetite, nausea, vomiting, fever, extreme tiredness, or stomach pain.

The best protection from hepatitis B is to be vaccinated with the hepatitis B vaccine, which is safe and effective. Research is also being carried out on drugs that have the potential for improving treatment of chronic hepatitis.

In 1997, hepatitis B case reports were essentially unchanged from 1996 and decreased by 15% from 1995. Sex-specific rates continue to be higher for males than females (5.2 vs. 4.5 per 100,000). Race-specific rates were over three times higher for African-Americans than for whites (7.0 vs. 2.2 per 100,000). Cases by age group and sex peak in age groups 20-54 years of age for males and 15-44 years of age for females. Of the 208 cases reported, 46 contained information regarding drug use. Of these, 2 (4%) cases reportedly used IV drugs during the six weeks to 6 months prior to illness. One of 63 case reports (2%) and 2 of 42 (5%) case reports were either attendees of day care settings or contacts of day care attendees, respectively. Thirty-five out of 208 cases (17%) provided information about their hepatitis contacts. Of the 40 (63%) parishes reporting, the highest case rates per 100,000 were Red River (21), W. Feliciana (15), Tangipahoa (14), and Grant (11).

Pertussis (whooping cough) is a respiratory illness that can affect all age groups, but mostly is found in infants and young children. It is caused by a bacterium called *Bordetella pertussis*. These bacteria are present in the mouths and noses of infected people. Pertussis symptoms are the usual cold symptoms, which then develop into coughing fits with a high-pitched "whooping" sound. Pertussis can be fatal in infants.



Immunization against pertussis involves five doses of the DTP (diphtheria, tetanus, and pertussis) combination vaccination starting at age two months.

There were 22 cases reported in Louisiana in 1997, a level that reflects an increase in reported cases and a return to the 1995 level of disease. Pertussis occurred nearly twice as often in females. All but three (86%) cases occurred in children less than five years of age. Nearly half of the cases lived in Public Health Region 1 (New Orleans area). Three cases occurred in children who were up-to-date for their age, but not old enough to have completed a primary vaccine series. Eleven cases were not old enough to have started the primary vaccination series. One case occurred in a child who had completed a primary vaccine series, but had not received the recommended boosters for his/her age. Of the three cases reported, two had unknown immunization histories, and one case occurred in an adult who had received five doses of pertussis vaccine in childhood. Fifteen cases were diagnosed by DFA, three by culture, three by both DFA and culture, and one was epidemiologically linked to a confirmed case.

Mumps is a viral respiratory disease that causes swelling and pain of salivary glands in the face and neck. Mumps is spread by contact with infected people. This disease is contagious from one to two days before and until seven days after symptoms appear. It is most infectious when the swelling starts. The symptoms are fever, pain in front of the ears that increases during chewing, and swollen glands in the cheeks and sometimes under the jaw. It is most likely to affect children ages five to nine, but may occur at any age. It is likely to be more serious and painful in teenagers and adults.

Immunization against mumps involves two doses of MMR (measles, mumps and rubella) vaccine, usually at ages 12 months and at four to six years.

In 1997, 18 cases of mumps were reported, down from 24 cases in 1996. Illness occurred equally in males and females. Four cases were reported in both Calcasieu and East Baton Rouge parish residents. Three cases were reported in St. Tammany parish residents. Sixty-seven percent of the cases occurred in those persons nineteen years of age and younger. For the second year in a row, the 5 – 9 year old age group had the largest number of cases. Six cases received two doses of MMR vaccine prior to the onset of mumps. Two cases received one dose of MMR vaccine prior to the onset of illness and were not old enough to have received the recommended second dose. One case received no vaccine due to vaccine deferment for long term illness. The remaining nine cases of mumps reported no vaccine history.

<i>Selected Infectious Diseases</i> <i>Louisiana 1993-1997</i>					
	1993	1994	1995	1996	1997
Hepatitis A	105	171	196	261	266
Hepatitis B	269	206	244	209	208
Pertussis	14	15	22	15	22
Mumps	20	39	15	24	18

Source: Louisiana Office of Public Health, Infectious Epidemiology Program



Selected Infectious Diseases by Parish*							
Louisiana, 1997							
Parish	Hepatitis A	Hepatitis B	Measles	Mumps	Pertussis	Rubella	Total
Louisiana	266	208	0	18	22	0	514
Acadia	1	4	0	0	0	0	5
Allen	0	2	0	0	0	0	2
Ascension	2	2	0	0	1	0	5
Assumption	0	1	0	0	0	0	1
Avoyelles	1	4	0	0	0	0	5
Beauregard	0	1	0	0	0	0	1
Bienville	1	0	0	0	0	0	1
Bossier	13	8	0	2	0	0	23
Caddo	38	22	0	1	2	0	63
Calcasieu	10	11	0	4	1	0	26
DeSoto	1	0	0	0	0	0	1
East Baton Rouge	9	9	0	4	0	0	22
East Carroll	0	1	0	0	0	0	1
Evangeline	6	2	0	0	0	0	8
Franklin	1	0	0	0	0	0	1
Grant	0	2	0	0	0	0	2
Iberia	0	5	0	0	0	0	5
Iberville	0	1	0	0	0	0	1
Jackson	1	0	0	0	0	0	1
Jefferson	20	23	0	1	4	0	48
LaSalle	1	0	0	0	0	0	1
Lafayette	11	2	0	0	0	0	13
Lafourche	1	5	0	0	1	0	7
Lincoln	3	1	0	0	0	0	4
Livingston	3	2	0	1	0	0	6
Morehouse	2	2	0	1	0	0	5
Natchitoches	4	1	0	0	0	0	5
Orleans	23	44	0	0	7	0	74
Ouachita	65	10	0	0	0	0	75
Plaquemines	0	2	0	0	0	0	2
Rapides	0	2	0	0	0	0	2
Red River	17	2	0	0	0	0	19
Richland	1	1	0	0	0	0	2
St. Bernard	4	2	0	0	0	0	6
St. Charles	0	1	0	0	1	0	2
St. James	1	0	0	0	0	0	1
St. John the Baptist	1	1	0	0	0	0	2
St. Landry	1	2	0	0	0	0	3
St. Martin	4	4	0	0	1	0	9
St. Mary	0	1	0	0	0	0	1
St. Tammany	6	4	0	3	2	0	15
Tangipahoa	1	13	0	0	0	0	14
Terrebonne	2	0	0	0	1	0	3
Union	3	1	0	1	0	0	5
Vernon	2	1	0	0	0	0	3
Washington	2	3	0	0	0	0	5
West Baton Rouge	0	1	0	0	0	0	1
West Feliciana	0	2	0	0	0	0	2
Webster	2	0	0	0	0	0	2
Winn	2	0	0	0	1	0	3

*Parishes with no cases reported are not included.

Source: Louisiana Office of Public Health, Infectious Epidemiology Program



B. TUBERCULOSIS (TB)

Background

Pulmonary Tuberculosis (TB) results from infection with an organism named *Mycobacterium tuberculosis*. Persons with TB may transmit the organism by coughing. If untreated, the pulmonary TB case may infect others who breathe in the organisms expelled by the infected person. Infection is not limited to the lungs; it also can occur in other regions of the body.

Due to the danger of contagion, individuals who have been exposed to TB should be identified and evaluated. A simple skin test is used to determine if the exposed person has been infected. If the skin test and evaluation reveal that the person has been infected, a course of preventive therapy may be prescribed to protect against progression from TB infection to TB disease. Preventive therapy generally consists of six-months of therapy with a single anti-TB drug called isoniazid, or INH.

Treatment of TB disease requires an initial course of four anti-tuberculosis drugs. Length of treatment for TB disease is usually six months, but may vary due to the severity of illness or the presence of other factors, such as HIV. Due to the potentially great public health impact of this infectious disease, and because of the intricacy of the therapy (i.e. length of treatment and number of medications involved), a practice called Directly Observed Therapy (DOT) is employed to assist the patient with his or her therapy and assure completion. With DOT, trained field staff or medical personnel monitor the efficacy of treatment and the patient's compliance with the treatment regimen.

1998 Status

Louisiana reported 380 cases of TB in 1998, for a case rate of 8.7 per 100,000 people. This represents a 6.4% decrease from the 1997 figure of 406 cases (9.3 per 100,000) and a 9.5% decrease since the 1996 report of 420 cases (9.6 per 100,000). Caution should be urged however; decreases over such a short period do not necessarily reflect a trend in tuberculosis control.

<i>Tuberculosis Case Counts Louisiana, 1994-1998</i>				
1994	1995	1996	1997	1998
434	475	420	406	380

Source: Louisiana Office of Public Health, Tuberculosis Program

In 1997, Louisiana's state ranking for TB case rates (per 100,000) was the 8th highest in the nation. Louisiana's 1997 rate was similar to those in neighboring states, but was significantly higher than the national rate of 7.4 per 100,000. The national rate for 1998 is as of yet unavailable; however, the state rate of 8.7 per 100,000 is expected to exceed the U.S. rate this year as well.

<i>Tuberculosis Cases and Rates Louisiana and Neighboring States, 1998</i>		
State	Number of Cases	Case Rate
Arkansas	171	7
Louisiana	380	8.7
Mississippi	225	Not Available
Texas	1820	9.3

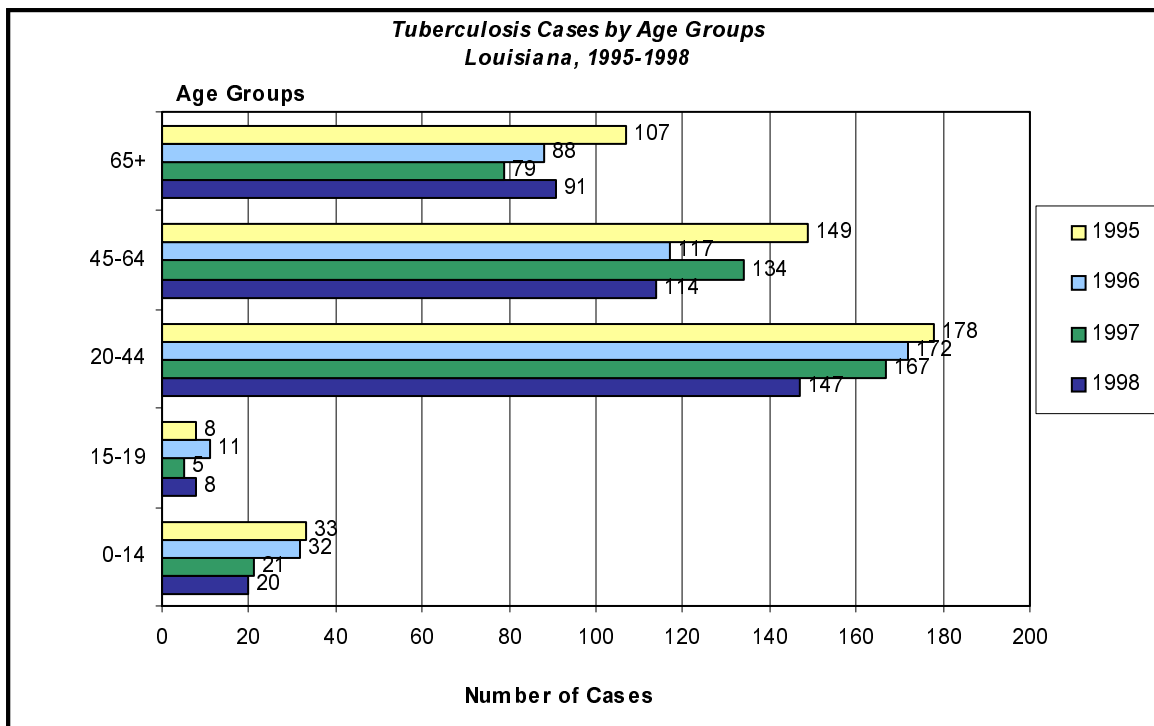
* Rate per 100,000 population

Source: Louisiana Office of Public Health, Tuberculosis Program



Drug-resistant TB continues to be a problem in Louisiana. While only one case of multi-drug-resistant tuberculosis (MDR-TB) was reported in 1998, the incidence of single-drug (INH) resistance continues to exceed 4% — the recommended threshold for initiating a four-drug anti-TB regimen for new (or suspected) cases of TB.

As shown in the following graph, decreases were observed in each age group, with the exception of a 60% increase in the 15-19 age group (5 cases in 1997 to 8 cases in 1998) and a 15% increase in the 65+ age group.



Source: Louisiana Office of Public Health, Tuberculosis Program



Louisiana Tuberculosis Cases and Rates By Region and Parish, 1998		
State Total = 380 Cases		
State Case Rate = 8.7 per 100,000		
Region/Parish	Cases	Rate/100,000
Region 1	139	13.5
Jefferson	47	10.3
Orleans	86	17.9
Plaquemines	3	11.6
St. Bernard	3	4.5
Region 2	32	5.6
Ascension	2	2.9
E. Baton Rouge	23	5.8
E. Feliciana	1	5.0
Iberville	4	12.8
Point Coupee	2	8.6
W. Baton Rouge	0	0
W. Feliciana	0	0
Region 3	34	7.4
Assumption	1	4.4
Lafourche	5	5.8
St. Charles	3	6.6
St. James	2	9.2
St. John	2	4.8
St. Mary	10	17.4
Terrebonne	11	10.8
Region 4	25	4.8
Acadia	3	5.2
Evangeline	2	5.8
Iberia	2	2.8
Lafayette	8	4.4
St. Landry	4	4.8
St. Martin	0	0
Vermilion	6	11.7
Region 5	28	7.9
Allen	0	0
Beauregard	4	12.6
Calcasieu	17	9.6
Cameron	4	44.1
Jefferson Davis	3	9.5
Region 6	18	6
Avoyelles	1	2.5
Catahoula	0	0
Concordia	1	4.8
Grant	1	5.5
LaSalle	2	14.4
Rapides	9	7.0
Vernon	2	3.6
Winn	2	11.6



Louisiana Tuberculosis Cases and Rates By Region and Parish, 1998		
Region/Parish	Cases	Rate/100,000
Region 7	47	9.3
Bienville	0	0
Bossier	8	8.7
Caddo	25	17.4
Claiborne	2	11.6
DeSoto	2	7.8
Natchitoches	0	0
Red River	1	10.3
Sabine	2	8.5
Webster	7	16.6
Region 8	43	12.2
Caldwell	1	10
E. Carroll	1	10.8
Franklin	1	4.5
Jackson	2	12.9
Lincoln	6	13.8
Madison	1	7.4
Morehouse	2	6.3
Ouachita	27	18.4
Richland	0	0
Tensas	0	0
Union	2	9.2
W. Carroll	0	0
Region 9	14	3.7
Livingston	2	2.5
St. Helena	1	10.3
St. Tammany	3	1.7
Tangipahoa	6	6.4
Washington	2	4.6

Source: Louisiana Office of Public Health, Tuberculosis Program

C. SEXUALLY TRANSMITTED DISEASES

Overview

Sexually transmitted diseases are the most commonly reported diseases in the United States and affect 15.3 million Americans in all population groups each year. By age 21, one in five young adults will have received treatment for an STD. Among the most serious complications are pelvic inflammatory disease, infertility, ectopic pregnancy, blindness, cancer associated with human papillomavirus, fetal and infant deaths, and congenital defects.¹

STD Rates* and National Rankings** Louisiana, 1994-1998						
Year	Primary and Secondary Syphilis		Gonorrhea		Chlamydia	
	Rate	Rank	Rate	Rank	Rate	Rank
1994	39	2	291	9	262	7
1995	24	2	251	10	254	11
1996	13	6	222	8	260	4
1997	9	7	255	5	273	7
1998	10	-	297	-	363	-

*Rates per 100,000 population 1990.

**States ranked from highest to lowest disease incidence. Nationwide figures for 1998 are not yet available.

Sources: Louisiana Office of Public Health, STD Control Program.
CDC STD Surveillance Report 1997.

Syphilis

Syphilis infections are caused by *Treponema pallidum*, aspirochete (bacteria). The primary stage of the disease is characterized by a painless, indurated ulcer that appears at the site(s) of exposure in about 21 days (range of 10-90 days) and lasts from 1 to 5 weeks. The secondary stage, which usually appears 1 to 5 weeks after the primary ulcer has healed, is characterized by skin rash, mucous patches, and condylomata lata, sometimes accompanied by generalized lymphadenopathy, headache, and fever. The latent stage is defined as any interval following the primary stage during which persons have no clinical signs or symptoms.

Louisiana had the second highest rate of syphilis nationwide during the 1994-1995 period; in 1997 the rate fell to seventh highest in the nation. The total number of cases of early syphilis (primary, secondary, and early latent syphilis) is consistently declining, from 5,373 cases in 1993, to 883 cases in 1998. In 1998, 51% of early syphilis cases occurred in females, and 90% of the cases occurred in African-Americans. Almost 66% of early syphilis cases occurred among the 15-34 year-old population.

During the last five years, sharp and consistent declines in early syphilis rates have occurred. In the white population, the rate decreased 38% between 1994 and 1995, 40% between 1995 and 1996, and 33% between 1996 and 1997. However, early syphilis rates increased 50% between 1997 and 1998. In African-Americans, the rate decreased 35% between 1994 and 1995, 43% between 1995 and 1996, 40% between 1996 and 1997, and 6% between 1997 and 1998.

¹ National Center for Health Statistics. Healthy People 2000 Review, 1997. Hyattsville, Maryland: Public Health Service. 1997.



Early Syphilis (Primary, Secondary, and Early Latent) Rates,* by Sex and Race Louisiana, 1994-1998									
Year	White			Black			Other		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
1994	7	9	8	277	301	290	15	5	10
1995	3	6	5	181	197	189	17	7	12
1996	2	3	3	107	109	108	2	5	4
1997	2	2	2	61	68	65	2	2	2
1998	3	3	3	64	58	61	10	7	9

*Rates per 100,000 population 1990

Source: Louisiana Office of Public Health, STD Control Program

The Louisiana incidence rate for primary and secondary syphilis for 1998 was 10 per 100,000 people (Census 1990), and the national rate for 1997 was 3.2. *The Healthy People 2000 Review 1997* objective for primary and secondary syphilis is to reduce the incidence rate to no more than 4 cases per 100,000 people and the incidence among African-Americans to no more than 30 cases per 100,000.

Primary and Secondary Syphilis Rates* Louisiana, Neighboring States, and United States, 1993-1997					
	1993	1994	1995	1996	1997
Alabama	20.8	15.7	14.4	12.4	9.6
Arkansas	23.0	18.2	19.9	10.5	6.9
Louisiana	61.0	39.0	24.0	13.0	8.4
Mississippi	66.7	78.1	72.4	30.4	14.4
Texas	14.0	10.4	8.3	4.8	3.5
United States	10.3	7.9	6.3	4.3	3.2

*Rates per 100,000 population

Sources: Louisiana Office of Public Health, STD Control Program

CDC STD Surveillance Report 1997

Gonorrhea

Infections by *Neisseria gonorrhoeae* may be symptomatic or asymptomatic, and they include genital, anorectal, and pharyngeal infections.

Louisiana had the ninth highest rate of gonorrhea nationwide in 1994, and the tenth highest in 1995. In 1996, Louisiana declined to the eighth highest, and then to the fifth highest in 1997. The total number of cases of gonorrhea had been consistently declining, from 12,288 cases in 1994 to 10,761 cases in 1997, but in 1998 the number rose to 12,543. In 1998, 49% of the cases of gonorrhea occurred in females; 88% of the cases occurred in African-Americans; one third of the cases occurred among teens 15-19 year old, and almost 32% of the cases of gonorrhea occurred among 20-24 year olds.



Gonorrhea Rates* by Sex And Race Louisiana, 1994-1998									
Year	White			Black			Other		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
1994	19	33	26	1133	616	857	46	39	43
1995	18	29	23	940	564	740	37	41	39
1996	14	27	21	842	489	655	37	59	48
1997	17	36	27	833	615	717	66	88	78
1998	19	35	28	958	757	851	49	124	88

*Rates per 100,000 population 1990.

Source: Louisiana Office of Public Health, STD Control Program

The Louisiana incidence rate of gonorrhea for 1998 was 297 per 100,000 population (Census 1990), and the national rate for 1997 was 123. *The Healthy People 2000 Review 1997* objective for gonorrhea is to reduce the rate to: a) an incidence of no more than 100 cases per 100,000 people, b) an incidence of no more than 650 cases per 100,000 among African-Americans, c) an incidence of no more than 375 per 100,000 persons age 15-19, and d) an incidence of no more than 175 per 100,000 persons age 15-44.

Gonorrhea Rates* Louisiana, Neighboring States, and the United States, 1993-1997					
State	1993	1994	1995	1996	1997
Alabama	378	376	345	310	282
Arkansas	313	281	227	204	175
Louisiana	314	291	251	222	255
Mississippi	397	429	353	250	307
Texas	167	162	165	124	139
United States	172	165	149	124	123

*Rates per 100,000 population 1990.

Sources: Louisiana Office of Public Health, STD Control Program

CDC STD Surveillance Report 1997

Chlamydia

Infection caused by *Chlamydia trachomatis* is among the most prevalent STDs in the United States. Therapy for these infections is commonly based on the clinical syndrome, or as simultaneous treatment for gonorrhea.

Louisiana had the seventh highest rate of chlamydia nationwide in 1994 and the eleventh in 1995. Then in 1996, Louisiana moved back to the fourth highest rate, and then dropped to the fifth highest in 1997. The total number of cases of chlamydia declined from 11,079 cases in 1993 to 10,727 cases in 1995. Since 1996, disease counts have risen (10,991 in 1996, 11,512 in 1997, and 15,305 in 1998), mainly due to improved laboratory reporting. In 1998, 80% of chlamydia cases occurred in females; 78% of cases occurred in African-Americans; 42% of cases among 15-19 year-olds, and more than 34% of the chlamydia cases occurred among 20-24 year-olds.

The Louisiana chlamydia rate for 1998 was 363 per 100,000 population (1990), and the national rate for 1997 was 207. *The Healthy People 2000 Review 1997* objective for chlamydia trachomatis infections is to reduce the prevalence in women under 25 years of age to no more than 5% (as measured by a decrease in the prevalence of chlamydia infection among family planning clients).



Chlamydia Rates* by Sex and Race Louisiana, 1994-1998									
Year	White			Black			Other		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
1994	16	116	67	318	973	668	32	139	85
1995	12	102	58	251	1011	657	37	176	106
1996	14	27	21	842	489	655	37	59	48
1997	17	36	27	833	615	717	66	88	78
1998	25	125	76	411	1360	919	71	278	174

*Rates per 100,000 population 1990.

Source: Louisiana Office of Public Health, STD Control Program

Chlamydia Rates* Louisiana, Neighboring States, and the United States, 1993-1997					
State	1993	1994	1995	1996	1997
Alabama	NR**	12	75	195	204
Arkansas	29	28	32	27	85
Louisiana	292	262	254	260	363
Mississippi	NR**	NR**	34	161	291
Texas	243	251	238	230	265
United States	180.4	193.3	190.4	194.5	207.0

*Rates per 100,000 population

**NR=No report

Sources: Louisiana Office of Public Health, STD Control Program

CDC STD Surveillance Report 1997

Sexually Transmitted Disease Rates* by Parish Louisiana, 1998			
Parish	Early Syphilis (Primary, Secondary, and Early Latent)	Gonorrhea	Chlamydia
Acadia	0	202	184
Allen	0	99	193
Ascension	24	139	194
Assumption	48	101	436
Avoyelles	5	54	115
Beauregard	3	100	203
Bienville	6	288	532
Bossier	0	224	371
Caddo	15	683	675
Calcasieu	18	287	344
Caldwell	0	194	285
Cameron	0	76	97
Catahoula	0	81	136
Claiborne	40	230	442
Concordia	0	149	154
DeSoto	12	410	576
East Baton Rouge	31	357	314
East Carroll	21	185	639
East Feliciana	0	265	328
Evangeline	0	162	186
Franklin	0	183	331
Grant	0	23	51

*Rates per 100,000 population 1990



Sexually Transmitted Disease Rates* by Parish Louisiana, 1998			
Parish	Early Syphilis (Primary, Secondary, and Early Latent)	Gonorrhea	Chlamydia
Iberia	48	413	429
Iberville	68	161	155
Jackson	0	236	401
Jefferson	13	147	218
Jefferson Davis	7	166	339
Lafayette	23	273	343
Lafourche	77	150	212
LaSalle	0	15	59
Lincoln	5	357	522
Livingston	4	96	128
Madison	32	345	834
Morehouse	31	476	607
Natchitoches	11	540	709
Orleans	40	544	678
Ouachita	17	464	448
Plaquemines	8	55	106
Pointe Coupee	27	115	248
Rapides	11	232	305
Red River	11	511	714
Richland	0	276	504
Sabine	0	221	446
St. Bernard	2	57	105
St. Charles	0	94	160
St. Helena	0	253	334
St. James	19	134	259
St. John	30	195	305
St. Landry	7	370	283
St. Martin	5	223	352
St. Mary	29	220	318
St. Tammany	5	93	94
Tangipahoa	30	429	503
Tensas	56	239	211
Terrbonne	62	257	338
Union	5	213	420
Vermilion	0	116	188
Vernon	2	97	247
Washington	32	266	347
Webster	0	279	362
West Baton Rouge	67	175	191
West Carroll	8	99	240
West Feliciana	8	155	163
Winn	0	61	191
State Total	21	297	363

*Rates per 100,000 population 1990

Source: Louisiana Office of Public Health, STD Control Program



D. HIV/AIDS

1997 Status

In 1997, Louisiana ranked 9th among states with the highest AIDS (Acquired Immunodeficiency Syndrome) rates. Among U.S. cities, New Orleans ranked 11th and Baton Rouge ranked 19th highest.

HIV/AIDS is a growing threat to public health and will continue to make major demands on our health and social service systems for many decades. The lifetime medical cost of caring for a person with AIDS is over \$100,000, most of which is paid by the government. Each year new infections obligate Louisiana to \$150 million in future medical costs.

New therapy with protease inhibitors has been shown to be effective in the treatment of HIV (Human Immunodeficiency Virus) infection. These new therapies have altered the natural history of HIV infection, slowing progression from HIV to AIDS and from AIDS to death for persons infected with HIV. Consequently, an increasing number of persons are living with HIV infection.

In keeping with national trends, Louisiana has seen an increase in HIV/AIDS cases in rural communities, minorities, adolescents and women, and intravenous drug users. The majority of cases continues to be in men who have sex with men.

The gap between the case rate of African-American individuals and white individuals continues to increase. Sixty-nine percent of the total AIDS cases in 1997 occurred in the African-American population. African-Americans accounted for approximately 73% of the HIV cases identified in 1997.

HIV/AIDS has been steadily on the rise in the heterosexual population – HIV/AIDS cases due to heterosexual contact increased from less than 5% in 1990 to 18% in 1997. Despite the increasing number of women infected with HIV, the number of pediatric HIV/AIDS cases (children diagnosed when younger than 13 years of age) has been decreasing in recent years; this decline is credited to improved treatment protocols for HIV-infected pregnant women and increased use of antiretrovirals in this same group.

<i>Persons Living with HIV/AIDS, by Risk Factor Louisiana, 1993-1997</i>					
<i>Risk Behavior</i>	<i>Year</i>				
	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>
Total Living Cases	7125	8040	8687	9531	10561
Cases with Specified Risk	6124	6702	6986	7312	7741
MSM*	63%	60%	57%	55%	54%
IDU*	21%	22%	23%	24%	24%
HRH*	12%	14%	15%	17%	18%
Transf/Hemo*	3%	2%	2%	2%	2%
Perinatal	1%	1%	2%	2%	2%
Risk Unknown/Still under Investigation	1001	1338	1701	2219	2820

* MSM: Men who have Sex with Men; IDU: Injection Drug Users (non-MSM);

HRH: High Risk Heterosexual; Transf/Hemo: Transfusion/Transplant/Hemophiliac

Source: Louisiana Office of Public Health, HIV/AIDS Program



AIDS Cases and Rates									
Louisiana, Neighboring States, and United States, 1995-1997									
State	1995		1996		1997		Cumulative Totals		
	Cases	Rate/ 100,000	Cases	Rate/ 100,000	Cases	Rate/ 100,000	Adults	Children less than 13	Total
Alabama	642	15.1	607	14.2	570	13.2	4,774	63	4,837
Arkansas	277	11.2	267	10.7	242	9.6	2,356	35	2,391
Louisiana	1,087	25	1,463	33.7	1,094	25.1	10,096	112	10,208
Mississippi	442	16.4	450	16.6	347	12.7	3,160	47	3,207
Texas	4,477	23.9	4,799	25.1	4,718	24.3	44,164	337	44,501
United States	74,180	27.8	68,808	25.5	60,634	22.3	633,000	8,086	641,086

Source: Louisiana Office of Public Health, HIV/AIDS Program

E. CANCER

1991-1995 Status

According to the American Cancer Society, one in every five deaths in the United States is attributable to cancer. More people are surviving cancer now than ever before, but this trend is not true for all groups. Survival rates can vary according to race.

Due to the possibility of natural fluctuations in cancer incidence that take place from year to year, disease counts and rates have been combined to encompass a five-year period. This allows a more reliable examination of the data for identification of cancers that are of most concern in our state.

Five Most Common Cancers		
Louisiana, 1991-1995		
Type	Number of Cases	Rate per 100,000
All Cancers	90,587	393.8
Lung	16,267	72.5
Prostate	14,102	60.6
Breast	12,322	53.9
Colon & Rectum	10,543	45.0
Bladder	3,472	14.8

Source: Louisiana Tumor Registry

The risk for many cancers can be significantly reduced by practicing preventive measures. The National Cancer Institute estimates that tobacco accounts for over 30% of cancers, and dietary factors account for another 35%. For example, most of the lung cancers can be prevented by not smoking, and diets low in fat and high in fiber may help prevent colon, rectal, breast, prostate, and other cancers.

Both preventive measures and early detection are important to cancer death rates. Mammography, clinical breast examination, Pap tests, fecal occult blood tests, and proctosigmoidoscopy (colon exam with lighted scope) make it possible to detect and treat cancers in their early stages and prevent spreading. However, despite modern technology and knowledge, a significant portion of the population at risk for various cancers fails to participate in screening procedures.²

² *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. United States Department of Health and Human Services. Washington: GPO, 1990.



Cancer is not just one, but many diseases, and is associated with a variety of risk factors. Since 1950, overall cancer mortality rates have changed little, but there have been significant changes in mortality for some age groups and cancers. Several prevalent forms of cancer, such as breast and prostate, can be either prevented or diagnosed early enough to prevent the spread to other organs.

Five Most Common Cancers in Males Louisiana, 1991-1995					
Whites		Blacks		Total *	
Type	Rate**	Type	Rate**	Type	Number
All Cancers	490.2	All Cancers	558.8	All Cancers	49,135
Prostate	136.4	Prostate	176.9	Prostate	14,102
Lung	103.2	Lung	135.1	Lung	10,565
Colon & Rectum	53.9	Colon & Rectum	52.8	Colon & Rectum	5,176
Bladder	30.5	Stomach	19.7	Bladder	2,548
Non-Hodgkin's Lymphoma	18.4	Oral Cavity & Pharynx	18.6	Non-Hodgkin's Lymphoma	1,690

* All races combined

** Average annual age-adjusted (1970 US) incidence rates per 100,000 population

Source: Louisiana Tumor Registry

Five Most Common Cancers in Females Louisiana, 1991-1995					
Whites		Blacks		Total *	
Type	Rate**	Type	Rate**	Type	Number
All Cancers	320.4	All Cancers	308.6	All Cancers	41,452
Breast	99.2	Breast	86.7	Breast	12,199
Lung	46.3	Lung	39.7	Lung	5,702
Colon & Rectum	38.2	Colon & Rectum	40.3	Colon & Rectum	5,367
Corpus Uteri	13.6	Cervix Uteri	16.1	Corpus Uteri	1,720
Non-Hodgkin's Lymphoma	12.8	Corpus Uteri	13.5	Non-Hodgkin's Lymphoma	1,525

* All races combined

** Average annual age-adjusted (1970 US) incidence rates per 100,000 population

Source: Louisiana Tumor Registry

Background³

Breast cancer is the most frequently occurring invasive cancer among women in the United States. It is second only to lung cancer in cancer-related deaths. Nationwide, the death rate from breast cancer has decreased 6.3% between 1991 and 1995. Certain factors—such as family history, exposure to hormones, reproduction issues, and alcohol use—can influence the risk for breast cancer. A debate concerning the association between high-fat diets and increased breast cancer risk has not been resolved. In the past two years, it has been discovered that alterations in two genes can account for up to 90% of inherited breast cancer, which constitutes 5-10% of all breast cancers. Early detection improves the chances of survival, and the National Cancer Institute (NCI) recommended in 1997 that women in their forties or older get screening mammograms on a regular basis, every 1 to 2 years. Women who are at increased risk for breast cancer should seek medical advice about when to begin having mammograms and how often to be screened.

³From National Cancer Institute (NCI) resources and publications. Statistics quoted pertain to the United States.



Cervical cancer (Cervix Uteri) afflicts 15,000 women each year. Increased use of the Pap test has contributed to a 50 percent drop in cervical cancer deaths since 1969. Women who are or have been sexually active, or have reached age 18, should have Pap tests and physical exams regularly.

Colorectal cancer is the second leading cause of cancer death, third among men and third in women. Studies have shown that lifestyle factors may cause colon and rectum cancers. A diet high in fruits, vegetables, and fiber and low in fat appears to reduce the risk of colorectal cancer. Exercise may also lower the risk for this cancer. Although there is no general agreement that screening for colon cancer definitely reduces mortality, annual fecal occult blood tests have proved useful in identifying people who should have further tests to rule out colon cancer and other diseases, especially for those over 50. The potential benefit of regular sigmoidoscopies is currently being investigated by NCI.

Kidney cancer accounts for approximately 2% of all new cancers each year in the United States. Renal cell cancer and renal pelvis cancer account for 70% and 15% respectively, with the remainder being primarily composed of cancer of the ureter (8%) and urethra (4%). While abuse of analgesics has been causally linked to increased risk, and beverages such as coffee, tea, and alcoholic drinks have not been found to be important risk factors, a consistent risk factor has been obesity. Perhaps the best known factor is cigarette smoking. Given the present knowledge about cancers of the kidney, prevention is best achieved by cessation of cigarette smoking. About one-third of renal cell cancers and more than one-half of renal pelvis and ureter cancers could be avoided by eliminating the use of tobacco.

Leukemias together account for 2.5% of the total annual cancer incidence in the United States, and about one-third of cancers in children. Five main types (and an increasing number of subtypes) have been identified. Rates for all types of leukemia are higher among males than among females; for most leukemias, rates are higher among whites than African-Americans.

Lung cancer is the largest single cause of cancer mortality in the United States. It is difficult to detect and hard to treat, and responsible for approximately 30% of all cancer deaths. Smoking is responsible for 87% of lung cancers. The risk of dying of lung cancer is 22 times higher for male smokers and 12 times higher for female smokers than for people who have never smoked. Unfortunately, smoking rates have begun to rise in children for the last several years and in adults more recently.

Melanoma of the skin incidence has increased dramatically over the last several decades. It represents only about 5% of all skin cancers in the United States, but it is responsible for about 75% of all skin cancer deaths. Survival rates have been increasing because of earlier diagnoses, but the total mortality rate continues to increase because of the increase in incidence.

Non-Hodgkin's lymphoma cases have been increasing steadily but inexplicably over the past several decades. A continued, or perhaps larger, increase is anticipated because of AIDS-related cases. The cofactors that predispose AIDS cases to lymphoma need elucidation, and research is needed into other possible causes, such as hair-coloring products, pesticides, nitrates, solvents, other industrial chemicals, and viruses other than HIV.

Oral cavity and pharynx cancer account for approximately 4% of all malignancies. In Americans, oral cancer is 2-3 times more common among males than females. Tobacco and alcohol account for approximately three-fourths of all oral cancers in the United States. Epidemiologic evidence



indicates that smoking and drinking are independent risk factors that produce a synergistic effect when combined. Use of snuff is a primary cause of cancers of the gum and cheek. Although not as prevalent, habitual use of pipes, cigars, and smokeless tobacco is associated with relative risks as great as those for cigarette smoking.

Ovarian cancer strikes more than 22,000 women every year. About 1 in every 70 women in the United States will develop ovarian cancer during her lifetime. Currently, the five-year survival rate is approximately 42%. The NCI is currently conducting a study to determine whether screening can detect the cancer early enough to reduce mortality.

Pancreatic cancer is a 'silent' disease that is asymptomatic until well advanced. Survival is poor; only about 3% of patients are alive five years after diagnosis. In 1990-94 it ranked 13th of all cancers in the United States for incidence but was fifth for cancer mortality. Little is known about the etiology, and the only established risk factor is cigarette smoking.

Prostate cancer is the most frequently diagnosed invasive cancer in men, but is a distant second to lung cancer as a cause of death. There is increasing evidence that diet plays an important role in prostate cancer development. Hormones are also being investigated, as well as occupational and other lifestyle factors. The NCI is currently conducting a study to determine whether regular screening with a digital rectal exam and a blood test for prostate-specific antigen (PSA) is beneficial.

Uterine cancer (Corpus Uteri) is the fourth most common cancer among women in the United States and accounts for approximately 9% of cases. However, a limited number of deaths come from this disease, as reflected in a high five-year survival rate of 83%.

Urinary bladder cancer is the fifth most common cancer in the United States, where it is chiefly a disease of white men over 65. The most important known risk factor is cigarette smoking; smokers demonstrate a 2-3 fold increased risk over non-smokers. Workers who are exposed to benzidine and 2-naphthylamine are believed to be at an elevated risk for bladder cancer due to the potent carcinogenicity of these two chemicals. Artificial sweeteners do not appear to increase risk, and coffee drinking appears to have little or no effect.



Top Five Cancers and Number of Cases by Region and Parish Louisiana, 1991-1995						
Region/Parish	Total		Males		Females	
Louisiana	All Cancers	90,587	All Cancers	49,135	All Cancers	41,452
	Lung	16,267	Prostate	14,102	Breast	12,199
	Prostate	14,102	Lung	10,565	Lung	5,702
	Breast	12,322	Colon & Rectum	5,176	Colon & Rectum	5,367
	Colon & Rectum	10,543	Bladder	2,548	Corpus Uteri	1,720
	Bladder	3,472	Non-Hodgkin's Lymphoma	1,690	Non-Hodgkin's Lymphoma	1,525
Region 1	All Cancers	23,543	All Cancers	12,468	All Cancers	11,075
	Lung	4,179	Prostate	3,372	Breast	3,369
	Breast	3,403	Lung	2,603	Lung	1,576
	Prostate	3,372	Colon & Rectum	1,324	Colon & Rectum	1,488
	Colon & Rectum	2,812	Bladder	736	Corpus Uteri	411
	Bladder	1,004	Oral Cavity & Pharynx/ Non-Hodgkin's Lymphoma	441*	Non-Hodgkin's Lymphoma	379
Jefferson	All Cancers	9,798	All Cancers	5,189	All Cancers	4,609
	Lung	1,720	Prostate	1,477	Breast	1,425
	Prostate	1,477	Lung	1,032	Lung	688
	Breast	1,437	Colon & Rectum	553	Colon & Rectum	581
	Colon & Rectum	1,134	Bladder	351	Non-Hodgkin's Lymphoma	189
	Bladder	448	Non-Hodgkin's Lymphoma	191	Ovary	178
Orleans	All Cancers	11,678	All Cancers	6,155	All Cancers	5,523
	Lung	2,040	Prostate	1,646	Breast	1,685
	Breast	1,704	Lung	1,306	Colon & Rectum	773
	Prostate	1,646	Colon & Rectum	642	Lung	734
	Colon & Rectum	1,415	Bladder	297	Corpus Uteri	218
	Bladder	448	Skin Melanoma	281	Cervix Uteri	200
Plaquemines	All Cancers	441	All Cancers	262	All Cancers	179
	Lung	91	Lung	61	Breast	54
	Prostate	57	Prostate	57	Lung	30
	Breast	55	Colon & Rectum	29	Colon & Rectum	21
	Colon & Rectum	50	Bladder	16	Stomach	9
	Bladder	20	Oral Cavity & Pharynx	15	Corpus Uteri	6
St. Bernard	All Cancers	1,626	All Cancers	862	All Cancers	764
	Lung	328	Lung	204	Breast	205
	Colon & Rectum	213	Prostate	192	Lung	124
	Breast	207	Colon & Rectum	100	Colon & Rectum	113
	Prostate	192	Bladder	72	Non-Hodgkin's Lymphoma	32
	Bladder	88	Kidney & Renal Pelvis/ Non-Hodgkin's Lymphoma	32*	Corpus Uteri	28

*Number of cases is the same at each site



Top Five Cancers and Number of Cases by Region and Parish Louisiana, 1991-1995						
Region/Parish	Total		Males		Females	
Region 2	All Cancers	10,921	All Cancers	6,091	All Cancers	4,830
	Prostate	2,104	Prostate	2,104	Breast	1,509
	Lung	1,710	Lung	1,071	Lung	639
	Breast	1,524	Colon & Rectum	625	Colon & Rectum	621
	Colon & Rectum	1,246	Bladder	314	Corpus Uteri	202
	Bladder	412	Non-Hodgkin's Lymphoma	215	Ovary	172
Ascension	All Cancers	1,109	All Cancers	653	All Cancers	456
	Prostate	207	Prostate	207	Breast	150
	Lung	173	Lung	117	Colon & Rectum	62
	Breast	153	Colon & Rectum	66	Lung	56
	Colon & Rectum	128	Bladder	37	Ovary	21
	Bladder	52	Leukemias	20	Bladder	15
East Baton Rouge	All Cancers	7,524	All Cancers	4,120	All Cancers	3,404
	Prostate	1,474	Prostate	1,474	Breast	1,074
	Lung	1,185	Lung	716	Lung	469
	Breast	1,084	Colon & Rectum	431	Colon & Rectum	441
	Colon & Rectum	872	Bladder	212	Corpus Uteri	140
	Bladder	274	Non-Hodgkin's Lymphoma	137	Ovary	117
East Feliciana	All Cancers	439	All Cancers	273	All Cancers	166
	Prostate	82	Prostate	82	Breast	55
	Lung	75	Lung	61	Lung	14
	Breast	55	Colon & Rectum	30	Colon & Rectum	13
	Colon & Rectum	43	Bladder / Non-Hodgkin's Lymphoma	13*	Corpus Uteri	10
	Bladder/ Non-Hodgkin's Lymphoma	19	Larynx	9	Pancreas	7
Iberville	All Cancers	704	All Cancers	379	All Cancers	325
	Prostate	121	Prostate	121	Breast	101
	Breast	102	Lung	49	Lung	41
	Lung	90	Colon & Rectum	39	Colon & Rectum	38
	Colon & Rectum	77	Non-Hodgkin's Lymphoma	20	Cervix Uteri	25
	Kidney & Renal Pelvis	28	Bladder	19	Kidney & Renal Pelvis/ Pancreas	13*
Pointe Coupee	All Cancers	510	All Cancers	291	All Cancers	219
	Prostate	99	Prostate	99	Breast	62
	Lung	70	Lung	51	Colon & Rectum	37
	Breast	63	Colon & Rectum	24	Lung	19
	Colon & Rectum	61	Bladder/ Oral Cavity & Pharynx	13*	Corpus Uteri	14
	Non-Hodgkin's Lymphoma	18	Leukemias	12	Non-Hodgkin's Lymphoma	11

*Number of cases is the same at each site



Top Five Cancers and Number of Cases by Region and Parish Louisiana, 1991-1995						
Region/Parish	Total		Males		Females	
West Baton Rouge	All Cancers	424	All Cancers	237	All Cancers	187
	Prostate	82	Prostate	82	Breast	50
	Lung	71	Lung	44	Lung	27
	Breast	50	Colon & Rectum	25	Colon & Rectum	22
	Colon & Rectum	47	Pancreas/ Bladder	14*	Pancreas	10
	Pancreas	24	Non-Hodgkin's Lymphoma	12	Corpus Uteri	9
West Feliciana	All Cancers	211	All Cancers	138	All Cancers	73
	Lung	46	Prostate	39	Breast	17
	Prostate	39	Lung	33	Lung	13
	Colon & Rectum	18	Colon & Rectum	10	Colon & Rectum	8
	Breast	17	Oral Cavity & Pharynx/ Non-Hodgkin's Lymphoma	7*	Ovary/ Corpus Uteri	4*
	Non-Hodgkin's Lymphoma	10	Pancreas/ Bladder	6*	Pancreas/ Kidney & Renal Pelvis/ Brain/ Non-Hodgkin's Lymphoma	3*
Region 3	All Cancers	6,495	All Cancers	3,619	All Cancers	2,876
	Lung	1,189	Prostate	946	Breast	873
	Prostate	946	Lung	832	Colon & Rectum	358
	Breast	881	Colon & Rectum	418	Lung	357
	Colon & Rectum	776	Bladder	189	Corpus Uteri	116
	Bladder	265	Non-Hodgkin's Lymphoma	151	Non-Hodgkin's Lymphoma	102
Assumption	All Cancers	430	All Cancers	247	All Cancers	183
	Lung	96	Prostate / Lung	67*	Breast	64
	Prostate	67	Colon & Rectum	25	Lung	29
	Breast	64	Bladder	16	Colon & Rectum	18
	Colon & Rectum	43	Pancreas	9	Cervix Uteri	7
	Bladder	20	Oral Cavity & Pharynx/ Multiple Myeloma	7*	Pancreas/ Non-Hodgkin's Lymphoma	6*
Lafourche	All Cancers	1,446	All Cancers	779	All Cancers	667
	Lung	288	Prostate / Lung	196	Breast	181
	Prostate	196	Colon & Rectum	98	Lung	92
	Breast	183	Bladder	46	Colon & Rectum	83
	Colon & Rectum	181	Non-Hodgkin's Lymphoma	34	Non-Hodgkin's Lymphoma	36
	Non-Hodgkin's Lymphoma	70	Stomach	21	Corpus Uteri	34

*Number of cases is the same at each site



Top Five Cancers and Number of Cases by Region and Parish Louisiana, 1991-1995						
Region/Parish	Total		Males		Females	
St. Charles	All Cancers	758	All Cancers	393	All Cancers	365
	Breast	124	Prostate	117	Breast	123
	Lung	118	Lung	78	Colon & Rectum	44
	Prostate	117	Colon & Rectum	47	Lung	40
	Colon & Rectum	91	Non-Hodgkin's Lymphoma	17	Kidney & Renal Pelvis/ Bladder/ Ovary/ Pancreas/ Non-Hodgkin's Lymphoma	12*
	Non-Hodgkin's Lymphoma	29	Oral Cavity & Pharynx	15	Corpus Uteri	11
St. James	All Cancers	431	All Cancers	239	All Cancers	192
	Prostate	72	Prostate	72	Breast	65
	Lung	68	Lung	51	Colon & Rectum	22
	Breast	65	Colon & Rectum	28	Lung	17
	Colon & Rectum	50	Bladder	18	Corpus Uteri	12
	Bladder	22	Non-Hodgkin's Lymphoma	12	Kidney & Renal Pelvis	10
St. John	All Cancers	647	All Cancers	357	All Cancers	290
	Lung	108	Prostate	107	Breast	90
	Prostate	107	Lung	76	Colon & Rectum	37
	Breast	92	Colon & Rectum	39	Lung	32
	Colon & Rectum	76	Non-Hodgkin's Lymphoma	15	Stomach / Corpus Uteri	10*
	Non-Hodgkin's Lymphoma	24	Oral Cavity & Pharynx/ Bladder	13*	Cervix Uteri/ Non-Hodgkin's Lymphoma	9*
St. Mary	All Cancers	1,100	All Cancers	654	All Cancers	446
	Lung	192	Prostate	187	Breast	114
	Prostate	187	Lung	132	Colon & Rectum	64
	Colon & Rectum	123	Colon & Rectum	59	Lung	60
	Breast	115	Bladder	34	Ovary / Bladder/ Leukemias	15*
	Bladder	49	Leukemias	28	Cervix Uteri/ Corpus Uteri	14*
Terrebonne	All Cancers	1,683	All Cancers	950	All Cancers	733
	Lung	319	Lung	232	Breast	236
	Breast	238	Prostate	200	Colon & Rectum	90
	Colon & Rectum	212	Colon & Rectum	122	Lung	87
	Prostate	200	Bladder	52	Corpus Uteri	33
	Non-Hodgkin's Lymphoma	72	Non-Hodgkin's Lymphoma	51	Ovary	27

*Number of cases is the same at each site



Top Five Cancers and Number of Cases by Region and Parish Louisiana, 1991-1995						
Region/Parish	Total		Males		Females	
Region 4	All Cancers	10,538	All Cancers	5,533	All Cancers	5,005
	Lung	2,014	Lung	1,344	Breast	1,450
	Breast	1,459	Prostate	1,297	Lung	670
	Prostate	1,297	Colon & Rectum	587	Colon & Rectum	616
	Colon & Rectum	1,203	Bladder	270	Non-Hodgkin's Lymphoma	208
	Non-Hodgkin's Lymphoma	417	Oral Cavity & Pharynx	223	Pancreas	199
Acadia	All Cancers	1,303	All Cancers	676	All Cancers	627
	Lung	253	Lung	167	Breast	180
	Breast	180	Prostate	153	Colon & Rectum	93
	Colon & Rectum	168	Colon & Rectum	75	Lung	86
	Prostate	153	Oral Cavity & Pharynx	34	Leukemias	28
	Non-Hodgkin's Lymphoma	45	Bladder	33	Pancreas	22
Evangeline	All Cancers	756	All Cancers	406	All Cancers	350
	Lung	155	Lung	113	Breast	80
	Colon & Rectum	103	Prostate	79	Colon & Rectum	56
	Breast	80	Colon & Rectum	47	Lung	42
	Prostate	79	Pancreas	21	Pancreas	16
	Pancreas	37	Bladder	19	Cervix Uteri/ Corpus Uteri	14*
Iberia	All Cancers	1,466	All Cancers	788	All Cancers	678
	Lung	294	Prostate	192	Breast	186
	Prostate	192	Lung	184	Lung	110
	Breast	187	Colon & Rectum	91	Colon & Rectum	70
	Colon & Rectum	161	Bladder	37	Corpus Uteri	30
	Bladder	53	Oral Cavity & Pharynx	29	Pancreas	28
Lafayette	All Cancers	3,092	All Cancers	1,541	All Cancers	1,551
	Lung	556	Lung	361	Breast	515
	Breast	520	Prostate	335	Lung	195
	Prostate	335	Colon & Rectum	156	Colon & Rectum	153
	Colon & Rectum	309	Bladder	82	Non-Hodgkin's Lymphoma	68
	Non-Hodgkin's Lymphoma	135	Non-Hodgkin's Lymphoma	67	Pancreas	61
St. Landry	All Cancers	1,870	All Cancers	1,012	All Cancers	858
	Lung	376	Prostate	261	Breast	229
	Prostate	261	Lung	259	Colon & Rectum	122
	Breast	232	Colon & Rectum	107	Lung	117
	Colon & Rectum	229	Bladder	55	Non-Hodgkin's Lymphoma	39
	Bladder	70	Oral Cavity & Pharynx	36	Pancreas	36

*Number of cases is the same at each site



Top Five Cancers and Number of Cases by Region and Parish Louisiana, 1991-1995						
Region/Parish	Total		Males		Females	
St. Martin	All Cancers	845	All Cancers	445	All Cancers	400
	Lung	155	Lung	107	Breast	115
	Breast	115	Prostate	101	Colon & Rectum	51
	Prostate	101	Colon & Rectum	47	Lung	48
	Colon & Rectum	98	Bladder / Non-Hodgkin's Lymphoma	17*	Non-Hodgkin's Lymphoma	20
	Non-Hodgkin's Lymphoma	37	Stomach	16	Corpus Uteri	19
Vermilion	All Cancers	1,206	All Cancers	665	All Cancers	541
	Lung	225	Prostate	176	Breast	145
	Prostate	176	Lung	153	Lung	72
	Breast	145	Colon & Rectum	64	Colon & Rectum	71
	Colon & Rectum	135	Oral Cavity & Pharynx	30	Non-Hodgkin's Lymphoma	34
	Non-Hodgkin's Lymphoma	62	Non-Hodgkin's Lymphoma	28	Corpus Uteri	23
Region 5	All Cancers	5,628	All Cancers	3,020	All Cancers	2,608
	Lung	1,077	Prostate	802	Breast	730
	Prostate	802	Lung	660	Lung	417
	Breast	739	Colon & Rectum	358	Colon & Rectum	316
	Colon & Rectum	674	Bladder	170	Corpus Uteri	126
	Bladder	236	Non-Hodgkin's Lymphoma/ Skin Melanomas	109	Non-Hodgkin's Lymphoma	108
Allen	All Cancers	464	All Cancers	249	All Cancers	215
	Lung	93	Lung	59	Breast	53
	Prostate	56	Prostate	56	Lung	34
	Breast	54	Colon & Rectum	25	Colon & Rectum	23
	Colon & Rectum	48	Oral Cavity & Pharynx	13	Cervix Uteri / Corpus Uteri	11*
	Skin Melanomas	20	Bladder	12	Skin Melanomas	10
Beauregard	All Cancers	587	All Cancers	322	All Cancers	265
	Lung	117	Prostate	90	Breast	72
	Prostate	90	Lung	78	Lung	39
	Breast	73	Colon & Rectum	31	Colon & Rectum	32
	Colon & Rectum	63	Skin Melanomas/ Non-Hodgkin's Lymphoma	14*	Cervix Uteri	15
	Non-Hodgkin's Lymphoma	24	Bladder/ Leukemias	11*	Corpus Uteri	13
Calcasieu	All Cancers	3,763	All Cancers	2,012	All Cancers	1,751
	Lung	700	Prostate	545	Breast	488
	Prostate	545	Lung	416	Lung	284
	Breast	493	Colon & Rectum	252	Colon & Rectum	224
	Colon & Rectum	476	Bladder	121	Corpus Uteri	79
	Bladder	174	Skin Melanomas	79	Non-Hodgkin's	73

*Number of cases is the same at each site



Top Five Cancers and Number of Cases by Region and Parish Louisiana, 1991-1995						
Region/Parish	Total		Males		Females	
Cameron	All Cancers	155	All Cancers	90	All Cancers	65
	Lung	29	Prostate	22	Breast	27
	Breast	27	Lung	21	Lung	8
	Prostate	22	Colon & Rectum	8	Colon & Rectum	6
	Colon & Rectum	14	Bladder	5	Kidney & Renal Pelvis	5
	Kidney & Renal Pelvis/ Non-Hodgkin's Lymphoma	8*	Non-Hodgkin's Lymphoma/ Leukemias/ Oral Cavity & Pharynx	4*	Non-Hodgkin's Lymphoma	4
Jefferson Davis	All Cancers	659	All Cancers	347	All Cancers	312
	Lung	138	Prostate	89	Breast	90
	Breast	92	Lung	86	Lung	52
	Prostate	89	Colon & Rectum	42	Colon & Rectum	31
	Colon & Rectum	73	Bladder	21	Corpus Uteri	21
	Non-Hodgkin's Lymphoma	27	Oral Cavity & Pharynx	13	Non-Hodgkin's Lymphoma	15
Region 6	All Cancers	5,945	All Cancers	3,304	All Cancers	2,641
	Lung	1,130	Prostate	877	Breast	676
	Prostate	877	Lung	752	Lung	378
	Colon & Rectum	735	Colon & Rectum	369	Colon & Rectum	366
	Breast	686	Bladder	177	Corpus Uteri	110
	Bladder	242	Non-Hodgkin's Lymphoma	122	Non-Hodgkin's Lymphoma	104
Avoyelles	All Cancers	857	All Cancers	493	All Cancers	364
	Lung	172	Prostate	128	Breast	87
	Prostate	128	Lung	123	Colon & Rectum	55
	Colon & Rectum	115	Colon & Rectum	60	Lung	49
	Breast	88	Bladder	20	Non-Hodgkin's Lymphoma	15
	Non-Hodgkin's Lymphoma	33	Non-Hodgkin's Lymphoma	18	Cervix Uteri	14
Catahoula	All Cancers	225	All Cancers	140	All Cancers	85
	Prostate	48	Prostate	48	Breast	22
	Lung	42	Lung	31	Colon & Rectum	12
	Colon & Rectum/ Breast	23*	Colon & Rectum	11	Lung	11
	Bladder	13	Bladder	9	Corpus Uteri	7
	Pancreas / Corpus Uteri	7*	Stomach/ Leukemias	4*	Ovary	6
Concordia	All Cancers	296	All Cancers	137	All Cancers	159
	Lung	68	Lung	39	Breast	33
	Colon & Rectum	39	Prostate	29	Lung	29
	Breast	33	Colon & Rectum	17	Colon & Rectum	22
	Prostate	29	Pancreas	7	Pancreas	12
	Pancreas	19	Oral Cavity & Pharynx/ Bladder	6*	Corpus Uteri	9

*Number of cases is the same at each site



Top Five Cancers and Number of Cases by Region and Parish Louisiana, 1991-1995						
Region/Parish	Total		Males		Females	
Grant	All Cancers	411	All Cancers	217	All Cancers	194
	Lung	79	Prostate	63	Breast	47
	Prostate	63	Lung	50	Colon & Rectum	32
	Colon & Rectum	53	Colon & Rectum	21	Lung	29
	Breast	47	Non-Hodgkin's Lymphoma	11	Corpus Uteri	11
	Pancreas/ Non-Hodgkin's Lymphoma	17*	Pancreas	10	Ovary	9
LaSalle	All Cancers	379	All Cancers	221	All Cancers	158
	Lung	66	Prostate	54	Breast	38
	Prostate	54	Lung	45	Lung	21
	Colon & Rectum	43	Colon & Rectum	27	Colon & Rectum	16
	Breast	38	Bladder	18	Non-Hodgkin's Lymphoma	10
	Bladder/ Non-Hodgkin's Lymphoma	22*	Non-Hodgkin's Lymphoma	12	Cervix Uteri	7
Rapides	All Cancers	2,651	All Cancers	1,478	All Cancers	1,173
	Lung	472	Prostate	409	Breast	326
	Prostate	409	Lung	317	Colon & Rectum	161
	Colon & Rectum	336	Colon & Rectum	175	Lung	155
	Breast	332	Bladder	81	Corpus Uteri	57
	Bladder	113	Oral Cavity & Pharynx	58	Non-Hodgkin's Lymphoma	50
Vernon	All Cancers	707	All Cancers	382	All Cancers	325
	Lung	140	Lung	88	Breast	84
	Breast	86	Prostate	85	Lung	52
	Colon & Rectum/ Prostate	85*	Colon & Rectum	37	Colon & Rectum	48
	Bladder	34	Bladder	27	Ovary	13
	Non-Hodgkin's Lymphoma	27	Non-Hodgkin's Lymphoma	15	Skin Melanomas/ Non-Hodgkin's Lymphoma	12*
Winn	All Cancers	419	All Cancers	236	All Cancers	183
	Lung	91	Prostate	61	Breast	39
	Prostate	61	Lung	59	Lung	32
	Colon & Rectum	41	Colon & Rectum	21	Colon & Rectum	20
	Breast	39	Bladder	11	Ovary	12
	Skin Melanomas	17	Kidney & Renal Pelvis/ Skin Melanomas	9*	Cervix Uteri	11

*Number of cases is the same at each site



Morbidity

1999 Louisiana Health Report Card

Top Five Cancers and Number of Cases by Region and Parish Louisiana, 1991-1995						
Region/Parish	Total		Males		Females	
Region 7	All Cancers	12,258	All Cancers	6,703	All Cancers	5,555
	Prostate	2,245	Prostate	2,245	Breast	1,587
	Lung	2,090	Lung	1,377	Colon & Rectum	752
	Breast	1,598	Colon & Rectum	674	Lung	713
	Colon & Rectum	1,426	Bladder	289	Corpus Uteri	280
	Bladder	407	Oral Cavity & Pharynx	221	Ovary	214
Bienville	All Cancers	495	All Cancers	275	All Cancers	220
	Prostate	107	Prostate	107	Breast	50
	Lung	77	Lung	53	Colon & Rectum	35
	Colon & Rectum	61	Colon & Rectum	26	Lung	24
	Breast	51	Leukemias	11	Cervix Uteri	13
	Leukemias	17	Oral Cavity & Pharynx/ Larynx/ Skin Melanomas/ Kidney & Renal Pelvis	8*	Corpus Uteri	11
Bossier	All Cancers	1,736	All Cancers	957	All Cancers	779
	Lung	324	Prostate	310	Breast	223
	Prostate	310	Lung	209	Lung	115
	Breast	225	Colon & Rectum	88	Colon & Rectum	99
	Colon & Rectum	187	Bladder	47	Ovary	42
	Bladder	61	Oral Cavity & Pharynx/ Non-Hodgkin's Lymphoma	33*	Corpus Uteri	34
Caddo	All Cancers	6,045	All Cancers	3,239	All Cancers	2,806
	Prostate	1,097	Prostate	1,097	Breast	843
	Lung	984	Lung	637	Colon & Rectum	386
	Breast	848	Colon & Rectum	328	Lung	347
	Colon & Rectum	714	Bladder	141	Corpus Uteri	141
	Non-Hodgkin's Lymphoma	203	Oral Cavity & Pharynx	122	Non-Hodgkin's Lymphoma	108
Claiborne	All Cancers	424	All Cancers	232	All Cancers	192
	Prostate	86	Prostate	86	Breast	65
	Lung	67	Lung	36	Lung	31
	Breast	65	Colon & Rectum	24	Colon & Rectum	25
	Colon & Rectum	49	Pancreas	15	Corpus Uteri/ Non-Hodgkin's Lymphoma	7*
	Pancreas	16	Non-Hodgkin's Lymphoma/ Leukemias	7*	Skin Melanomas/ Ovary	5*
DeSoto	All Cancers	635	All Cancers	358	All Cancers	277
	Prostate	130	Prostate	130	Breast	73
	Lung	104	Lung	73	Colon & Rectum	40
	Breast	73	Colon & Rectum	28	Lung	31
	Colon & Rectum	68	Bladder	18	Corpus Uteri/ Stomach	12*
	Bladder	28	Leukemias	11	Cervix Uteri	11

*Number of cases is the same at each site



Top Five Cancers and Number of Cases by Region and Parish Louisiana, 1991-1995						
Region/Parish	Total		Males		Females	
Natchitoches	All Cancers	784	All Cancers	404	All Cancers	380
	Lung	160	Prostate	109	Breast	97
	Prostate	109	Lung	105	Lung	55
	Breast	97	Colon & Rectum	41	Colon & Rectum	53
	Colon & Rectum	94	Bladder	20	Corpus Uteri	22
	Bladder	31	Oral Cavity & Pharynx	17	Ovary	15
Red River	All Cancers	235	All Cancers	131	All Cancers	104
	Prostate	40	Prostate	40	Breast	26
	Colon & Rectum	37	Lung	27	Colon & Rectum	18
	Lung	36	Colon & Rectum	19	Lung	9
	Breast	26	Skin Melanomas	5	Cervix Uteri	6
	Skin Melanomas	9	Stomach / Pancreas	4*	Non-Hodgkin's Lymphoma	5
Sabine	All Cancers	627	All Cancers	372	All Cancers	255
	Prostate	117	Prostate	117	Breast	57
	Lung	116	Lung	86	Colon & Rectum	36
	Colon & Rectum	74	Colon & Rectum	38	Lung	30
	Breast	57	Bladder	18	Corpus Uteri	19
	Bladder	28	Skin Melanomas	12	Cervix Uteri / Non-Hodgkin's Lymphoma	12*
Webster	All Cancers	1,277	All Cancers	735	All Cancers	542
	Prostate	249	Prostate	249	Breast	153
	Lung	222	Lung	151	Lung	71
	Breast	156	Colon & Rectum	82	Colon & Rectum	60
	Colon & Rectum	142	Bladder	32	Corpus Uteri	30
	Non-Hodgkin's Lymphoma	48	Skin Melanomas	22	Non-Hodgkin's Lymphoma	29
Region 8	All Cancers	7,998	All Cancers	4,383	All Cancers	3,615
	Lung	1,462	Prostate	1,317	Breast	1,041
	Prostate	1,317	Lung	980	Lung	482
	Breast	1,053	Colon & Rectum	422	Colon & Rectum	457
	Colon & Rectum	879	Bladder	185	Corpus Uteri	164
	Bladder	253	Oral Cavity & Pharynx	153	Pancreas / Non-Hodgkin's Lymphoma	117*
Caldwell	All Cancers	250	All Cancers	136	All Cancers	114
	Lung	49	Lung	39	Breast	32
	Colon & Rectum	35	Prostate	26	Colon & Rectum	17
	Breast	32	Colon & Rectum	18	Lung	10
	Prostate	26	Oral Cavity & Pharynx/ Pancreas/ Leukemias	7*	Cervix Uteri	7
	Pancreas / Leukemias	12*	Brain	5	Pancreas/ Non-Hodgkin's Lymphoma/ Leukemias	5*

*Number of cases is the same at each site



Top Five Cancers and Number of Cases by Region and Parish Louisiana, 1991-1995						
Region/Parish	Total		Males		Females	
East Carroll	All Cancers	239	All Cancers	135	All Cancers	104
	Lung	53	Prostate	48	Breast	31
	Prostate	48	Lung	34	Lung	19
	Breast	31	Colon & Rectum	12	Colon & Rectum	15
	Colon & Rectum	27	Oral Cavity & Pharynx	7	Kidney & Renal Pelvis	6*
	Oral Cavity & Pharynx/ Skin Melanomas	8*	Skin Melanomas	6	Cervix Uteri	4
Franklin	All Cancers	503	All Cancers	257	All Cancers	246
	Lung	87	Prostate	77	Breast	64
	Prostate	77	Lung	61	Colon & Rectum	27
	Breast	64	Colon & Rectum	18	Lung	26
	Colon & Rectum	45	Kidney & Renal Pelvis/ Bladder/ Leukemias	11*	Pancreas	15
	Pancreas	23	Stomach	9	Corpus Uteri / Skin Melanomas	11*
Jackson	All Cancers	494	All Cancers	278	All Cancers	216
	Prostate	92	Prostate	92	Breast	55
	Lung	78	Lung	54	Lung / Colon & Rectum	24*
	Colon & Rectum/ Breast	56*	Colon & Rectum	32	Cervix Uteri	12
	Skin Melanomas	24	Skin Melanomas	15	Corpus Uteri	11
	Non-Hodgkin's Lymphoma	14	Bladder	11	Skin Melanomas	9
Lincoln	All Cancers	857	All Cancers	466	All Cancers	391
	Prostate	162	Prostate	162	Breast	132
	Lung	149	Lung	96	Lung	53
	Breast	135	Colon & Rectum	44	Colon & Rectum	40
	Colon & Rectum	84	Skin Melanomas	22	Skin Melanomas	25
	Skin Melanomas	47	Bladder	17	Corpus Uteri	22
Madison	All Cancers	217	All Cancers	119	All Cancers	98
	Lung	44	Prostate	35	Breast	22
	Prostate	35	Lung	29	Colon & Rectum	21
	Colon & Rectum	33	Colon & Rectum	12	Lung	15
	Breast	22	Esophagus/ Stomach	7*	Ovary/ Kidney & Renal Pelvis	5*
	Stomach	11	Pancreas/ Bladder/ Leukemias	4*	Stomach	4
Morehouse	All Cancers	729	All Cancers	439	All Cancers	290
	Prostate	134	Prostate	134	Breast	86
	Lung	125	Lung	95	Colon & Rectum	38
	Breast	88	Colon & Rectum	40	Lung	30
	Colon & Rectum	78	Bladder	28	Corpus Uteri	16
	Bladder	35	Oral Cavity & Pharynx/ Pancreas	1*	Pancreas	14

*Number of cases is the same at each site



Top Five Cancers and Number of Cases by Region and Parish Louisiana, 1991-1995						
Region/Parish	Total		Males		Females	
Ouachita	All Cancers	3,066	All Cancers	1,611	All Cancers	1,455
	Lung	534	Prostate	466	Breast	457
	Prostate	466	Lung	333	Lung	201
	Breast	461	Colon & Rectum	166	Colon & Rectum	181
	Colon & Rectum	347	Bladder	72	Corpus Uteri	58
	Non-Hodgkin's Lymphoma	102	Oral Cavity & Pharynx	56	Cervix Uteri	50
Richland	All Cancers	594	All Cancers	343	All Cancers	251
	Lung	130	Prostate	99	Breast	62
	Prostate	99	Lung	84	Lung	46
	Colon & Rectum/ Breast	63*	Colon & Rectum	34	Colon & Rectum	29
	Leukemias	20	Oral Cavity & Pharynx/ Kidney & Renal Pelvis	14*	Corpus Uteri	14
	Skin Melanomas/ Kidney & Renal Pelvis/ Bladder	18*	Bladder/ Leukemias	12*	Cervix Uteri	11
Tensas	All Cancers	131	All Cancers	68	All Cancers	63
	Lung	35	Lung	27	Colon & Rectum	11
	Colon & Rectum	18	Prostate	17	Breast	10
	Prostate	17	Colon & Rectum	7	Lung	8
	Breast	10	Pancreas/ Bladder	2*	Corpus Uteri	7
	Corpus Uteri	7			Cervix Uteri	4
Union	All Cancers	570	All Cancers	315	All Cancers	255
	Lung	116	Prostate	96	Breast	62
	Prostate	96	Lung	86	Colon & Rectum	37
	Breast	63	Colon & Rectum	17	Lung	30
	Colon & Rectum	54	Oral Cavity & Pharynx	15	Corpus Uteri	11
	Oral Cavity & Pharynx	19	Bladder	10	Ovary / Non-Hodgkin's Lymphoma/ Leukemias	10*
West Carroll	All Cancers	348	All Cancers	216	All Cancers	132
	Prostate	65	Prostate	65	Breast	28
	Lung	62	Lung	42	Lung	20
	Colon & Rectum	39	Colon & Rectum	22	Colon & Rectum	17
	Breast	28	Bladder	11	Leukemias	8
	Non-Hodgkin's Lymphoma	13	Oral Cavity & Pharynx	9	Brain	7

*Number of cases is the same at each site



Top Five Cancers and Number of Cases by Region and Parish Louisiana, 1991-1995						
Region/Parish	Total		Males		Females	
Region 9	All Cancers	7,261	All Cancers	4,014	All Cancers	3,247
	Lung	1,416	Prostate	1,142	Breast	964
	Prostate	1,142	Lung	946	Lung	470
	Breast	979	Colon & Rectum	399	Colon & Rectum	393
	Colon & Rectum	792	Bladder	218	Non-Hodgkin's Lymphoma	133
	Bladder	288	Non-Hodgkin's Lymphoma	148	Ovary	131
Livingston	All Cancers	1,304	All Cancers	752	All Cancers	552
	Lung	271	Prostate	224	Breast	159
	Prostate	224	Lung	178	Lung	93
	Breast	162	Colon & Rectum	67	Colon & Rectum	64
	Colon & Rectum	131	Bladder	41	Non-Hodgkin's Lymphoma	21
	Bladder	54	Non-Hodgkin's Lymphoma	23	Ovary	20
St. Helena	All Cancers	132	All Cancers	81	All Cancers	51
	Lung	31	Prostate	29	Breast	17
	Prostate	29	Lung	25	Colon & Rectum	7
	Breast	17	Colon & Rectum	7	Lung	6
	Colon & Rectum	14	Esophagus / Leukemias	3*	Corpus Uteri	4
	Stomach / Corpus Uteri/ Leukemias	4*	Oral Cavity & Pharynx/ Stomach/ Liver	2*	Cervix Uteri	3
St. Tammany	All Cancers	2,905	All Cancers	1,582	All Cancers	1,323
	Lung	572	Prostate	430	Breast	422
	Prostate / Breast	430	Lung	361	Lung	211
	Colon & Rectum	303	Colon & Rectum	161	Colon & Rectum	142
	Bladder	135	Bladder	101	Ovary	56
	Non-Hodgkin's Lymphoma	130	Non-Hodgkin's Lymphoma	77	Non-Hodgkin's Lymphoma	53
Tangipahoa	All Cancers	1,856	All Cancers	1,008	All Cancers	848
	Lung	352	Prostate	298	Breast	237
	Prostate	298	Lung	245	Colon & Rectum	116
	Breast	240	Colon & Rectum	103	Lung	107
	Colon & Rectum	219	Bladder	51	Non-Hodgkin's Lymphoma	36
	Bladder	67	Oral Cavity & Pharynx	30	Pancreas / Ovary	34*
Washington	All Cancers	1,064	All Cancers	591	All Cancers	473
	Lung	190	Prostate	161	Breast	129
	Prostate	161	Lung	137	Colon & Rectum	64
	Breast	130	Colon & Rectum	61	Lung	53
	Colon & Rectum	125	Bladder	24	Pancreas / Corpus Uteri	23*
	Non-Hodgkin's Lymphoma	43	Non-Hodgkin's Lymphoma	21	Non-Hodgkin's Lymphoma	22

*Number of cases is the same at each site

Source: Louisiana Tumor Registry



F. CHRONIC DISEASE - BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (BRFSS)

Behavior-related illness and injury, such as heart disease, cancer, cerebrovascular disease, and motor vehicle-related injuries result in the premature death or compromised lifestyle of thousands of Louisiana residents each year. Most of the adults in the state report that they engage in at least one health behavior that places them at an increased, but avoidable, risk for these outcomes.

Prevention of illness before it occurs is a central aspect of the public health system. Achievement of this goal requires an understanding of the risk factors that lead to illness, and of the behaviors that put an individual at risk of illness. The goal of primary prevention programs is to reduce or prevent initiation of behaviors, such as smoking, alcohol use, sedentary lifestyles, and poor eating habits, known to be associated with chronic disease. The goal of secondary prevention is to reduce or delay chronic illnesses and deaths through the early identification and treatment of persons with early signs/symptoms of diseases, by promoting the use of scientifically validated screening exams for early detection of certain cancers, hypertension, breast cancer, and diabetes.

To collect information needed by its primary and secondary prevention programs, the Louisiana DEPARTMENT OF HEALTH AND HOSPITALS (DHH), OFFICE OF PUBLIC HEALTH, CHRONIC DISEASE CONTROL PROGRAM, in cooperation with the Centers for Disease Control and Prevention (CDC), began in 1991 to participate in the Behavioral Risk Factor Surveillance System (BRFSS). The purpose of the BRFSS is to provide state-level prevalence data on health-related behaviors and attitudes. Information collected in the survey is being used in the state's ongoing effort to plan, develop, and evaluate health promotion and disease prevention programs. Data from the BRFSS are also used to monitor progress toward achieving the national objectives of the Healthy People 2000 program of the United States Department of Health and Hospitals (USDHHS, 1990).

Adults aged 18 years and older who do not live in institutions such as geriatric centers, hospitals, jail, or prison may be included in the BRFSS. Some survey questions are asked each year and some are asked on alternating years. The following information, representing non-institutionalized Louisiana adult residents aged 18 and older, are from the most recent BRFSS that collected the specified data.

BRFSS: Tobacco Use

Cigarette Smoking

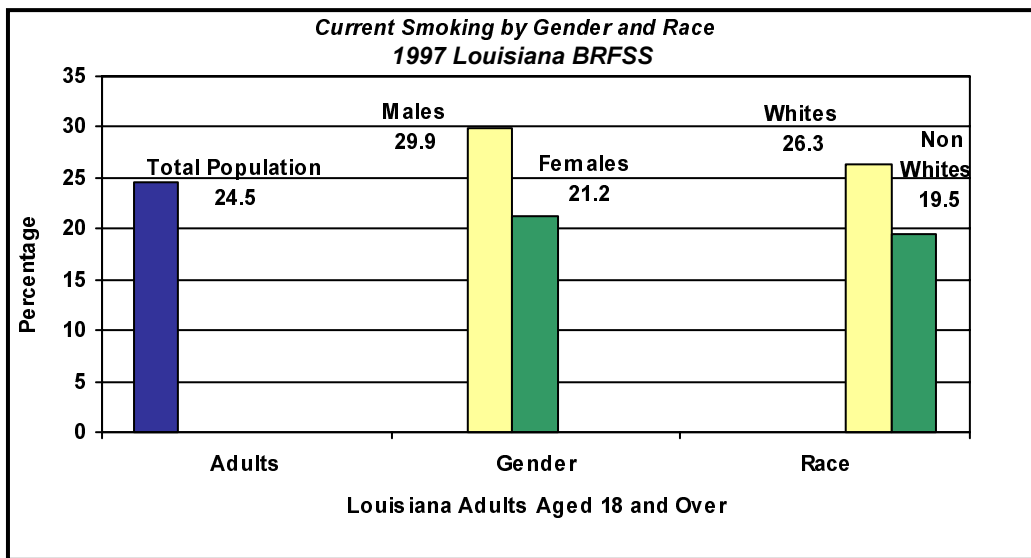
Each year smoking kills more people than alcohol, motor vehicle injuries, suicide, AIDS, homicide, illegal drugs, and fires combined. Cigarette smoking is the leading cause of preventable death and disease in the United States, accounting for more than 400,000 deaths nationally each year.

In 1994, twenty percent (7,951) of all deaths in Louisiana were attributable to cigarette smoking. Almost all (99%) of these deaths occurred as a result of cancer, heart disease, stroke, and vascular and respiratory diseases.

Current Smoking Rates

In 1997, according to BRFSS results, approximately one out of four adult Louisianians was a current smoker. Among current smokers, 47.6% attempted to quit smoking for one or more days during the 12 months preceding the survey.

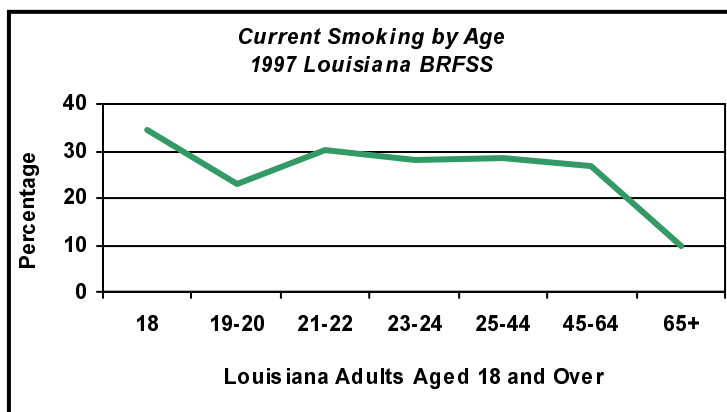
The prevalence of current smokers was higher in males (29.9%) than in females (21.2%). The white population had a higher prevalence of current smoking (26.3%) than the non-white population (19.5%). Prevalence of current smoking remained steady (approximately 28%) during the ages of 21-64 years and dramatically declined after age 65. This decline could be due to tobacco-related deaths and complications from tobacco use.



Source: Louisiana Office of Public Health, Chronic Disease Control Program

Cigarette Smoking and Youth

State and national data show that most current tobacco users actually begin using tobacco during their youth. The 1997 BRFSS data indicated that the highest proportion of current smokers was among the 18-year old age group (34.3%). This clearly justifies continued efforts to prevent tobacco use among youths. Based on research to date, the only proven method for reducing youth addiction is increased taxation. Studies have shown that about 10% fewer kids become addicted with each \$0.25 raise in tobacco taxation. The amount of taxation on cigarettes in Louisiana is low compared with other states.



Source: Louisiana Office of Public Health, Chronic Diseases Control Program



Smokeless Tobacco

The link between occurrence of oral cancer and the use of smokeless tobacco, snuff, and chewing tobacco has been clearly documented. The available research shows that snuff use increases the risk of oral cancer among nonsmokers four-fold. Among chronic snuff users the excess risk of cancer of the gum and buccal mucosa reaches nearly fifty-fold. In the United States, more than 30,000 cases a year of oral cancer are attributed to the use of smokeless tobacco.

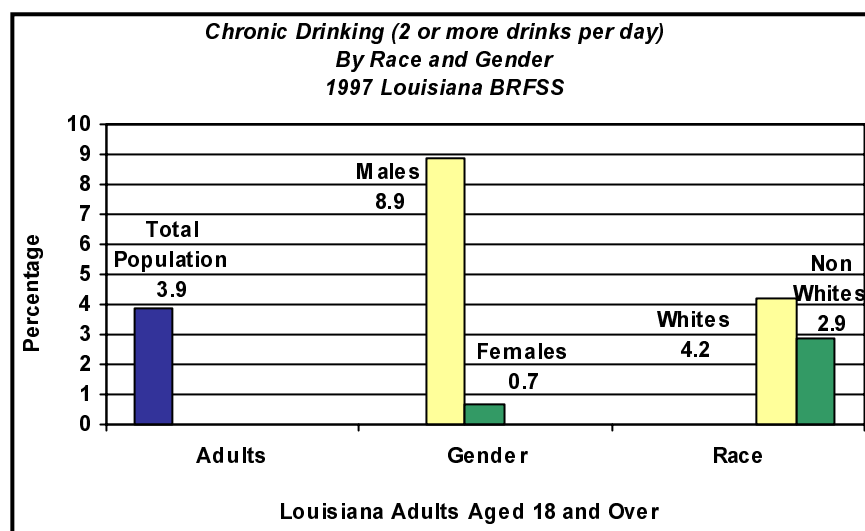
In the 1997 BRFSS, 3% of the adult population reported that they were current users of smokeless tobacco. However, 12.1% of the respondents indicated that they had used or tried smokeless tobacco products at some time. The overwhelming majority of current smokeless tobacco users were young, white, and male.

BRFSS: Alcohol Use

Health and social problems associated with heavy, chronic, and binge drinking are well recognized. Liver diseases are associated with chronic alcohol abuse, and fatal motor vehicle accidents are associated with heavy chronic and binge drinking. Chronic drinking is defined as 2 or more drinks daily for 30 days or at least 60 drinks per month. Binge drinking is defined as 5 or more drinks on one or more occasions within 30 days.

Based on the 1997 BRFSS, approximately 15.2% of the Louisiana adult population reported at least one episode of binge drinking in the 30 days prior to the survey. Men (24.2%) were four times more likely to engage in binge drinking than women (7.4%) were. Whites (15.9%) were more likely to report binge drinking than Non-Whites (9.7%). The prevalence of binge drinking decreased with increasing age.

Approximately 3.9% of adult Louisianians reported that they consumed at least two alcoholic drinks each day of the month prior to the survey. Males (8.9%) were more likely than females (0.7%) to report chronic alcohol use. Whites (4.2%) were more likely than Non-Whites (2.9%) to report chronic alcohol use.



Source: Louisiana Office of Public Health, Chronic Diseases Control Program

Drinking and Driving

Many studies suggest that automobile crashes in which alcohol plays a role tend to be much more severe than other crashes. Nationally, alcohol plays a role in about 20% of crashes involving serious injury to driver or passenger, about 50% of all fatal crashes, and about 60% of single-vehicle fatal crashes. Estimates place the number of deaths in the United States attributed to alcohol-related motor vehicle crashes at over 22,000.

Of those who indicated they had consumed alcohol in the month prior to the survey, 6.0% indicated that on at least one occasion they had driven when they had had too much to drink.

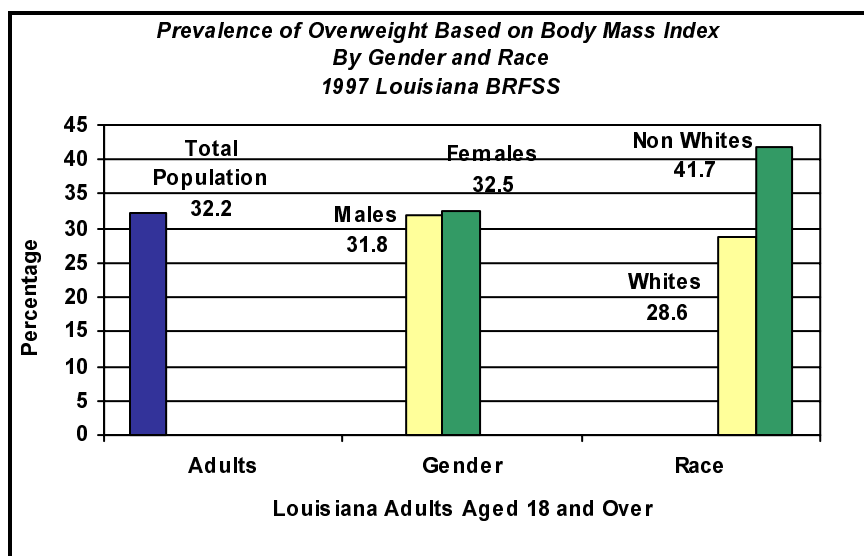
BRFSS: Nutrition and Exercise

Nutrition and exercise are important to good health overall and are related to weight or body fatness. Increases in body fatness are associated with high blood pressure, diabetes, coronary heart disease, and atherosclerosis. Additionally, high fat, low fiber diets are associated with various types of cancer.

Overweight

The Body Mass Index (BMI) is a measure of body fatness derived from height and weight. For males a BMI of 27.8 or greater is considered overweight. For females a BMI of 27.3 or higher is considered overweight.⁴

Nearly one third (32.2%) of Louisiana adults are overweight. With increasing age, there is a general trend toward increasing prevalence of overweight. There were no significant differences in overweight prevalence between females (32.5%) and males (31.8%). However, Non-Whites (41.7%) were more likely than Whites (28.6%) to be overweight. With age, prevalence increases up to age 65 years. Interestingly, Americans overall are not eating many more calories. The weight increases are tied more directly to a marked decline in physical activity.



Source: Louisiana Office of Public Health, Chronic Diseases Control Program

⁴National Center for Health Statistics. *Healthy People 2000 Review, 1997*. Hyattsville, Maryland: Public Health Service, 1997.



Fruit & Vegetable Consumption

The National Academy of Sciences, the U.S. Department of Agriculture, the U.S. Department of Health and Human Services, The American Cancer Society's and the National Cancer Institute's dietary guidelines for fiber intake specify that at least 5 servings of fruit and vegetables per day are consistent with the maintenance of good health and cancer prevention.

The BRFSS-1998 is collecting new data on this topic. According to the 1996 BRFSS data, less than 20% of Louisiana's adults reported consumption of 5 fruits and vegetables per day. Males (14.4%) were less likely than females (21.2%) to report meeting the dietary fiber guideline.

Physical Activity

The Surgeon General's report *Physical Activity and Health*⁵ concluded that individuals of all ages who engage in regular physical activity have a lower mortality rate than individuals with sedentary lifestyles. While higher levels of fitness have greater health benefits, studies suggest that even moderate amounts of activity are beneficial. New research indicates that 30 minutes of moderate physical activity, even if broken into 3 ten-minute episodes, convey significant health benefits. Increases in physical activity are associated with decreases in body fatness, lowering of blood pressure, and increased glucose tolerance.

Persons who report no physical activity, outside of work, are classified as sedentary. The BRFSS-1998 is collecting new data on this topic. According to the 1996 BRFSS data, one in three Louisiana adults is physically inactive; that is, they had not been involved in leisure time physical activities in the month preceding the survey. Another 27.5% engage in irregular physical activity; that is, less than 3 times a week or less than 20 minutes per session. Overall, 62.3% were sedentary. The prevalence of sedentary lifestyles was similar for males (60.7%) and females (63.7%). However, a larger proportion of Non-Whites (70.2%) than Whites (59.1%) reported sedentary lifestyles.

BRFSS: Health Status

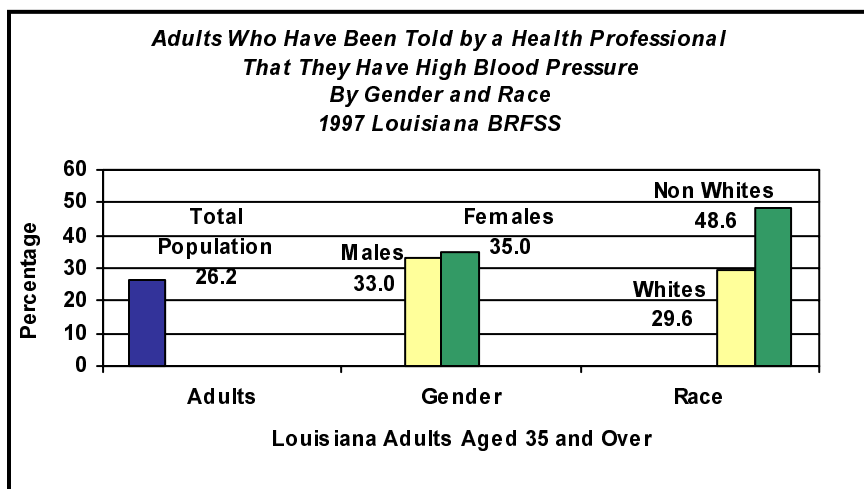
Overall, the health status of the adult population may be reflected in the chronic disease burden. Chronic diseases of public health importance (i.e. diseases that are among the leading causes of death, that have high economic and disability impact, etc.) include hypertension, high cholesterol, and diabetes. The goal of public health with regard to these diseases is early detection through periodic screening and treatment.

High Blood Pressure (Hypertension)

High blood pressure is associated with increased risk for stroke, kidney failure, and coronary heart disease. Blood pressure tends to increase with age and can be affected by weight gain, physical inactivity, and, to a lesser extent, diet. Blood pressure should be checked periodically; individuals with high levels (greater than 140/90 mm Hg) recorded more than once should be referred for treatment.

Approximately one out of every four Louisianians, 35 years of age and older, has been told by a health professional that he has high blood pressure. While there were no significant differences regarding gender, a large differential exists between races; 29.6% of Whites and 48.6% of Non-Whites indicated they were ever told that they had high blood pressure.

⁵*Physical Activity and Health: A Report of the Surgeon General*. Atlanta, Ga. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 1996.

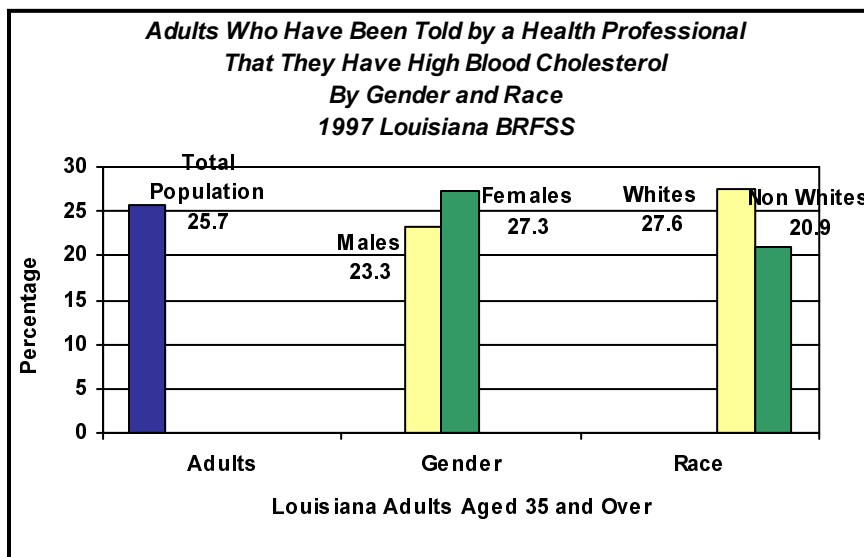


Source: Louisiana Office of Public Health, Chronic Disease Control Program

High Cholesterol

High blood cholesterol is one of the major modifiable risk factors for coronary heart disease. It has been estimated that each 1% reduction in blood cholesterol levels results in a 2% reduction in the risk for heart disease.

One in four (25.7%) Louisiana adults age 35 and above indicated that a physician or nurse had told him that he had high blood cholesterol. Approximately 23.3% of males and 27.3% of females, aged 35 and older, indicated they had been told by a health professional that they had high cholesterol.



Source: Louisiana Office of Public Health, Chronic Disease Control Program



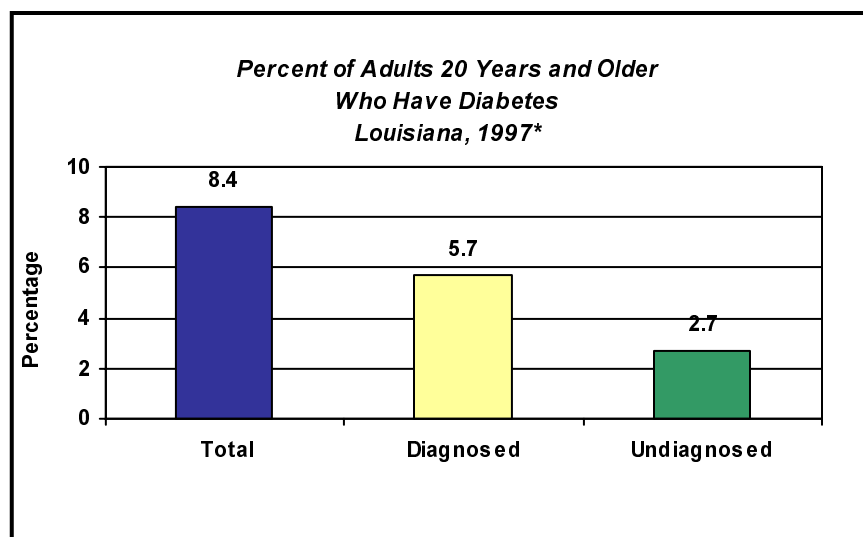
Diabetes

Diabetes is a complex, serious, and increasingly common disease. It is characterized by an inappropriately high glucose level in the blood, resulting from inadequate insulin production, inability of the body to use insulin, or both. Insulin is a hormone secreted by the pancreas that allows glucose to enter body cells and to be converted to energy, protein, and fat. Persons who are obese, physically inactive, or members of ethnic minorities (African-Americans, Hispanic/Latino Americans, and American Indians) and those with family history of diabetes or prior gestational diabetes are at a higher risk of acquiring diabetes.

Diabetes is the most common cause of non-traumatic amputations and end-stage renal disease and the leading cause of blindness in adults aged 20 to 74. In 1993 in Louisiana, diabetes caused an estimated 276 new cases of blindness, 1,162 lower extremity amputations, 417 new cases of end-stage kidney disease and 66,965 diabetes-related hospitalizations. The annual direct and indirect costs from diabetes in Louisiana exceed \$2 billion dollars.

Diabetes affects about 16 million Americans or 6% of the population of the United States. In 1994, Louisiana ranked second in the United States in self-reported prevalence of diagnosed diabetes.

An estimated 365,000 or 8.4% (5.7% diagnosed and 2.7% undiagnosed diabetes) of Louisiana residents 20 years and older have diabetes. Of the persons with diabetes, 32% or 115,000 are undiagnosed or unaware that they have diabetes and are therefore not receiving recommended treatment to prevent or delay the onset of complications. Over a million additional persons may be at increased risk for diabetes because of the risk factors of age, obesity, and sedentary lifestyle.

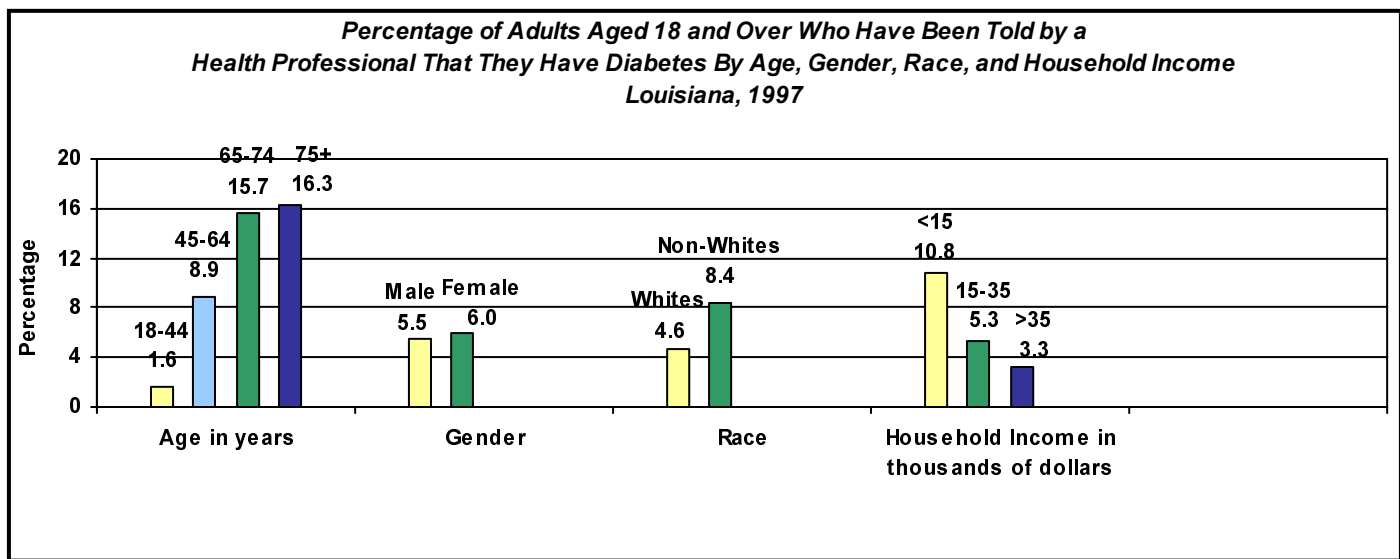


*Louisiana BRFSS aggregated for 1994-1997 for diagnosed and NHANES III for undiagnosed diabetes
Source: Louisiana Office of Public Health, Chronic Disease Control Program

In 1998, in-depth analysis of diabetes in Louisiana was performed using the most current available information. Data were compiled from the Louisiana BRFSS 1994-1997 interviews and the National Health and Nutrition Survey (NHANES III) conducted by the U.S. Centers for Disease Control. Analysis showed no statistically significant difference between females and males or among regions in Louisiana in self-reported risk of being diagnosed with diabetes. The prevalence of diabetes, however, increased as age increased, with the lowest rate of 1.6% in the 18 to 44 age group and the highest rate of 16.3% in 75+ age group. Persons older than 44 years were 7.4 times more likely to be diagnosed with diabetes as compared with persons less than 44 years of age.

Four point six percent of Whites and 8.4% of African-Americans reported having been diagnosed with diabetes. That is, the risk of being diagnosed with diabetes among African-Americans was 1.8 times higher than the risk among Whites. The prevalence of diabetes decreased with increasing household income. Individuals living in households with income less than \$15,000 a year had the highest prevalence —10.8% — while those living in households with annual incomes ranging from \$15,000 to \$35,000 and those above \$35,000 had rates of 5.3% and 3.3% respectively. In other words, the risk of being diagnosed with diabetes among persons with household income of less than or equal to \$15,000 was 2.3 times higher compared with the risk among households with an annual income of over \$15,000. Of the persons with diabetes, 55% were females, 84% were over 44 years of age (mean age of 61 years), 56% were white, 33% had a household income of less than \$15,000, 33% were employed and 41% were retired.

Diabetes is a risk factor for coronary heart disease and stroke. In fact, of the persons with diabetes in 1997, 13% were told they had coronary artery disease and 10% that they had had a stroke. Persons with diabetes are at even higher risk for cardiovascular disease morbidity and mortality because of the co-existence of other independent risk factors for cardiovascular disease. Fifty-one percent of persons with diabetes were found to be overweight based on body mass index, 29% were self-reported current smokers, 50% were told they have high blood pressure, and 38% were told they have high cholesterol. In addition, 68% reported no leisure time physical activity and 76% reported consuming less than the recommended five servings of fruit and vegetables a day.



Source: Louisiana BRFSS aggregated for 1994-1997

Diabetes is a common and serious disease in Louisiana. It is a costly disease not only in terms of the economic burden it imposes on the state but also in terms of the human suffering inflicted by the disease and its complications. At least 365,000 or 8.4% of Louisiana residents 20 years and older have diabetes. The prevalence of diabetes will continue to increase if the following trends continue: increase in the prevalence of obesity, ageing of the population, growth in minority populations, and persistence of socioeconomic gaps. Persons older than 44 years of age, African-Americans, and individuals with households income of less than 15,000 dollars are at higher risk of having diagnosed diabetes.



Diabetes surveillance should continue in order to identify high-risk groups, to monitor health outcomes and indicators of the quality of health care recommended for people with diabetes, to provide data to formulate health care policy, and to evaluate progress in disease prevention and control.

There is a need to develop effective intervention strategies to reduce the burden of diabetes. Much of the diabetes burden can be prevented with better education for diabetes self-management, early detection and treatment of complications, and improved delivery and quality of care with intensified efforts focused at high risk groups including the elderly, African-Americans, and the poor. Primary prevention through promotion of healthy behaviors that reduce obesity, such as proper nutrition and regular physical activity, and secondary prevention of diabetes complications via better clinical preventive services, including regular foot exams, dilated eye exams, and improved blood glucose control, will go far in reducing the diabetes burden.

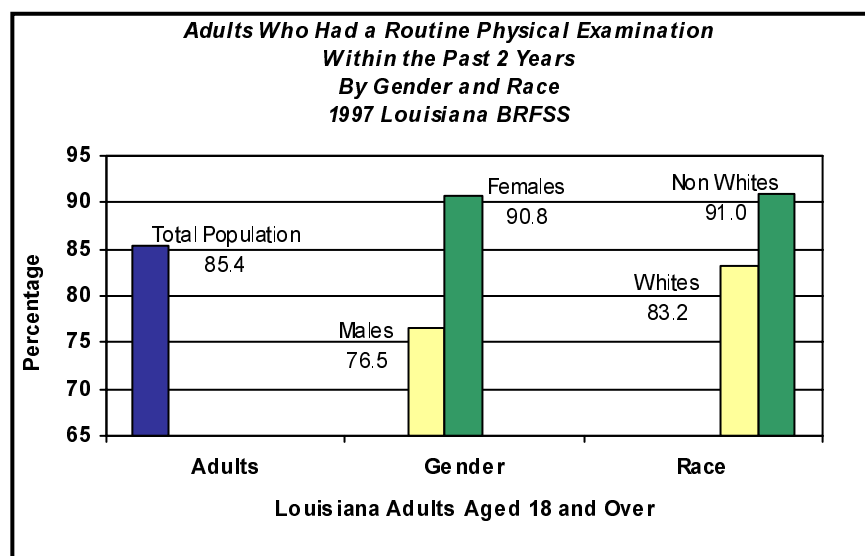
To reduce the burden of diabetes and diabetes complications, there is a need to develop new and to strengthen existing partnerships among private health care providers, appropriate governmental, voluntary, professional, and academic institutions and payers including Medicaid, managed care organizations, insurers, and employers. Because of the overlap in risk factors, intervention strategies, and programs for diabetes, cardiovascular and cerebrovascular diseases, and some cancers, prevention and control efforts need to be integrated and coordinated among several of the existing programs in chronic diseases within and outside the OFFICE OF PUBLIC HEALTH.

BRFSS: Preventive Health Care

Routine Medical Examinations

The routine medical examination gives the physician an opportunity to assess the general health status of patients, to assess the need for screening, and to counsel patients regarding perceived issues that affect the patient's health. Thus, it is the prime opportunity to practice preventive care.

In the 1997 BRFSS, 85.4% of the respondents had a routine checkup within the last 2 years. Women (90.8%) were more likely than men (76.5%) to have had a routine checkup within the past 2 years. Non-Whites (91.0%) were more likely than Whites (83.2%) to have had a routine checkup within the past 2 years.

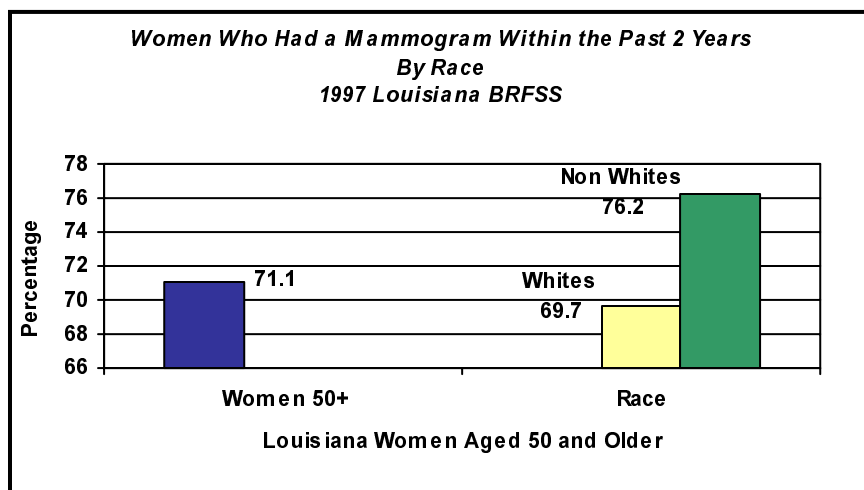


Source: Louisiana Office of Public Health, Chronic Disease Control Program

Mammography

Among women, breast cancer is the most commonly diagnosed cancer. Routine breast examinations by a health professional, or clinical breast examination and mammography are the most effective ways of detecting breast cancer early and improving the chances of survival. The National Cancer Institute, the American Cancer Society, and the United States Department of Health and Human Services recommend that women have a mammogram each year beginning at age 50. There is some controversy about the benefits of screening younger women.

In the 1997 BRFSS, among Louisiana women aged 50 and older, 71.1% reported they had had a mammogram within the 2 years before the survey. Non-Whites (76.2%) were more likely than Whites (69.7%) to report that they had had a mammogram within the last 2 years.

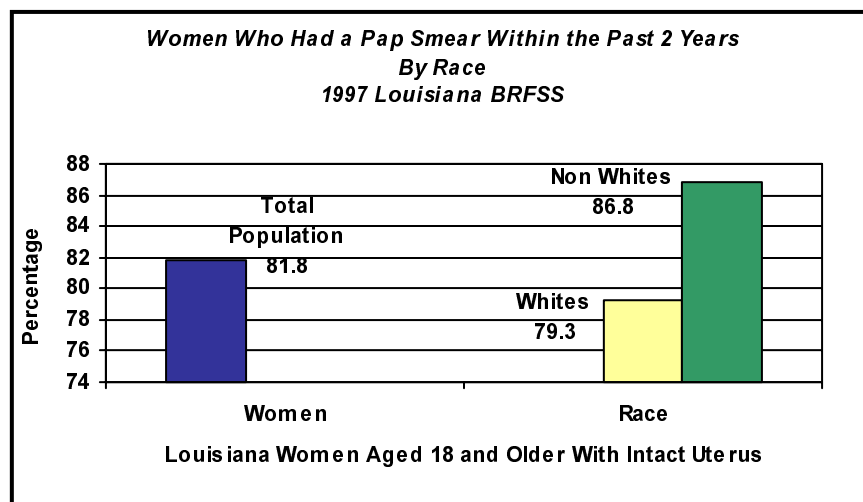


Source: Louisiana Office of Public Health, Chronic Disease Control Program

Pap Smear

A Pap smear is used to obtain a sample of cervical cells to be evaluated for dysplasia or cervical cancer. The American Cancer Society recommends annual Pap tests for all women who are or have been sexually active or who have reached age 18. Once 3 annual Pap smears have been normal, the test can be done every 3 years unless a physician recommends more frequent testing.

Among women who had an intact uterus (had not had a hysterectomy), 81.8% had had a Pap smear within the past two years. Non-White women (86.8%) were slightly more likely than White women (79.3%) to have had a Pap smear within the past two years.



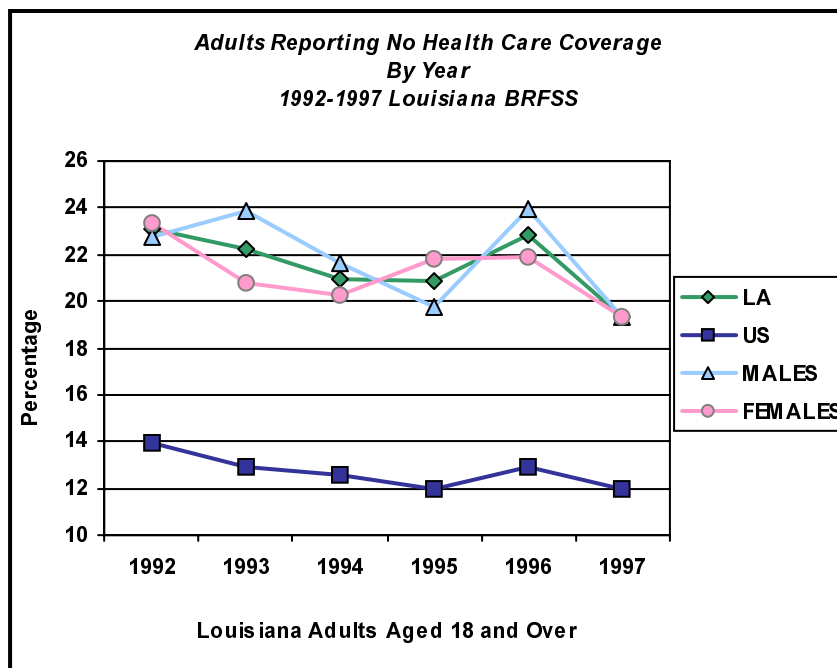
Source: Louisiana Office of Public Health, Chronic Disease Control Program

BRFSS: Medical Care Coverage

Availability of health care coverage is a crucial component in an individual's access to health care. An important Year 2000 Health Objective for the nation is to "improve financing and delivery of clinical preventive services so that virtually no American has a financial barrier to receiving, at a minimum, the screening, counseling, and immunization services recommended by the U.S. Preventive Services Task Force." Individuals without medical coverage, and even some individuals with coverage (underinsured), may not receive health care due to the cost of care. Therefore, measures of utilization of health care, including routine checkups, are dependent on coverage. The BRFSS assesses health care coverage by asking about private insurance, prepaid plans (HMOs), or Medicare.

Louisiana consistently has higher rates of adults with no health care coverage compared with the United States adult population at large.

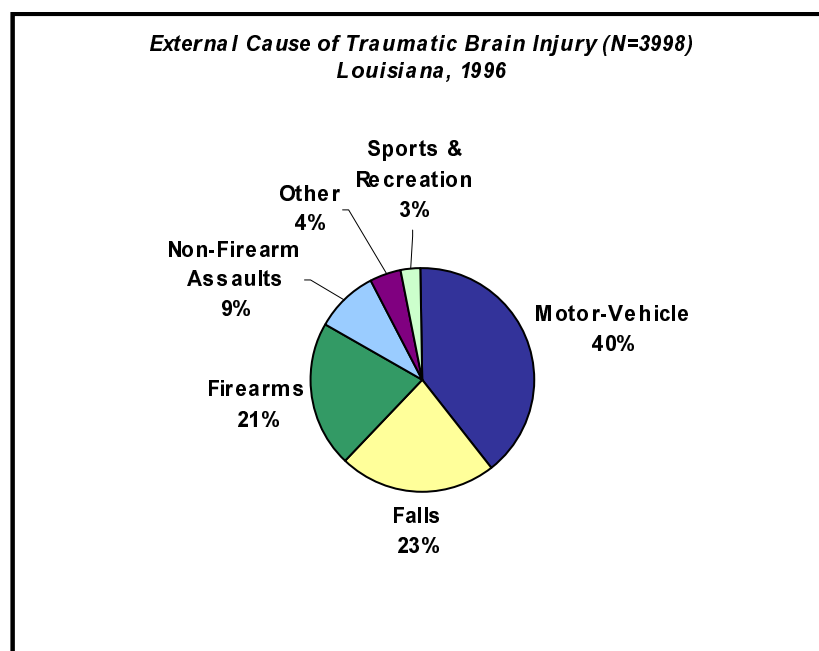
In the 1997 BRFSS, 19.3% of Louisiana adults who were surveyed reported that they had no health care coverage. While there were no disparities between rates of no health care coverage among females (19.3%) and males (19.3%), there was a clear racial difference, with Non-Whites (29.9%) being more likely than Whites (15.4%) to report a lack of health care coverage.



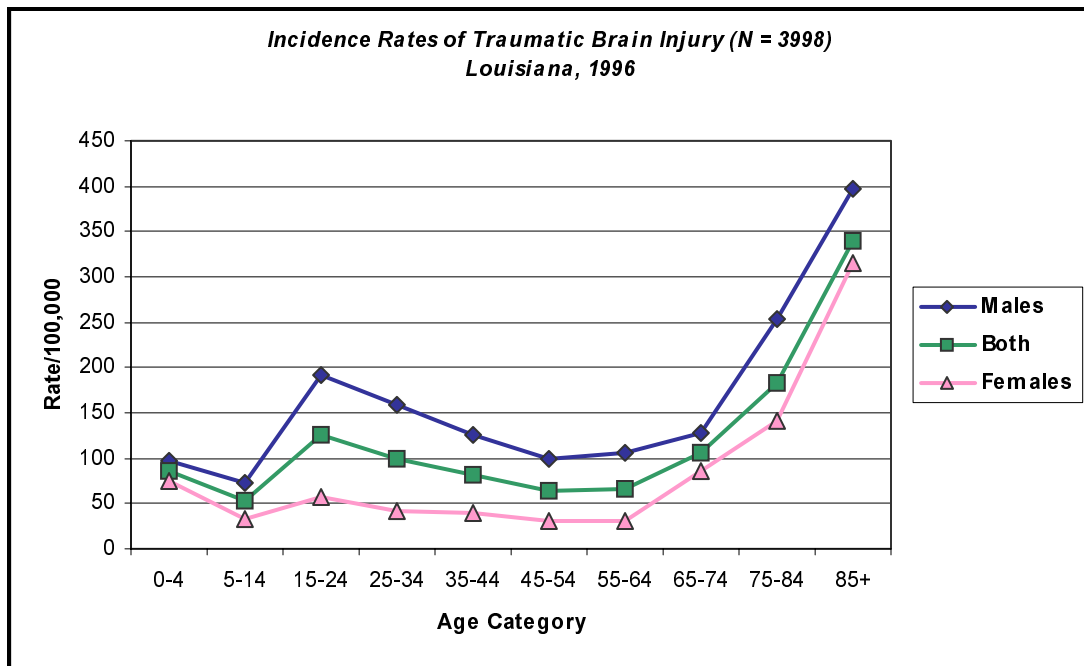
Source: Louisiana Office of Public Health, Chronic Disease Control Program

G. TRAUMATIC BRAIN INJURY

Injuries to the central nervous system are one of the most severe types of injuries in terms of both human suffering and costs to society. They are a major public health problem because of the permanence of the resulting disability, the high costs of acute and long-term treatment, and the fact that they frequently occur to young people. Traumatic brain injury is a reportable condition in Louisiana.



Source: Louisiana Office of Public Health, Injury Research and Prevention Section



Source: Louisiana Office of Public Health, Injury Research and Prevention Section

